

Version 2024.6 | Revision 01

# Russia Compliance

API Guide for Synchronous, Asynchronous, and  
REST Messages





# Table of Contents

|                                                            |           |
|------------------------------------------------------------|-----------|
| <b>Russia Compliance</b>                                   | <b>1</b>  |
| API Guide for Synchronous, Asynchronous, and REST Messages | 1         |
| <b>Get started</b>                                         | <b>18</b> |
| Intro to asynchronous messages                             | 19        |
| Message Type and Info Exchange display name                | 21        |
| Error messages                                             | 21        |
| Where are errors found in the UI?                          | 21        |
| What do the errors look like and how are they interpreted? | 23        |
| What are the different error types?                        | 25        |
| Map In Failed - Class 1 Errors                             | 25        |
| Processing Failed - Class 2 Errors                         | 25        |
| Map Out Failed                                             | 25        |
| Blocked                                                    | 25        |
| Needs Investigation                                        | 25        |
| What are the different error classes?                      | 26        |
| Class 1 Errors                                             | 26        |
| Class 2 Errors                                             | 26        |
| Class 3 Errors                                             | 26        |
| Intro to SOAP messages                                     | 27        |
| Authentication                                             | 27        |
| App-specific authentication                                | 28        |
| WSDL access                                                | 28        |
| SOAP API call limits                                       | 29        |

|                                                |           |
|------------------------------------------------|-----------|
| Intro to REST messages .....                   | 30        |
| <b>HTTP response status codes</b> .....        | <b>30</b> |
| Successful response .....                      | 30        |
| Redirect message .....                         | 30        |
| Client error status codes .....                | 30        |
| Server error status codes .....                | 31        |
| How to use this guide .....                    | 32        |
| <b>Read the guidelines table</b> .....         | <b>32</b> |
| <b>MDLP credential management</b> .....        | <b>33</b> |
| MDLP credential management APIs .....          | 35        |
| <b>Digital Certificate Upload (REST)</b> ..... | <b>35</b> |
| Digital Certificate Upload request .....       | 35        |
| Authentication .....                           | 35        |
| Guidelines .....                               | 36        |
| Example .....                                  | 36        |
| Errors .....                                   | 36        |
| Digital Certificate Upload response .....      | 36        |
| Guidelines .....                               | 36        |
| Example - Success .....                        | 37        |
| Example - Failure .....                        | 37        |
| <b>Report retrieval APIs</b> .....             | <b>37</b> |
| Tokens .....                                   | 37        |
| Authentication .....                           | 37        |
| Request guidelines .....                       | 38        |
| Request examples .....                         | 38        |
| Response guidelines .....                      | 38        |
| Response example .....                         | 39        |

|                                  |    |
|----------------------------------|----|
| <i>Errors</i> .....              | 40 |
| Tasks .....                      | 40 |
| <i>Authorization</i> .....       | 40 |
| <i>Request example</i> .....     | 40 |
| <i>Response guidelines</i> ..... | 41 |
| <i>Response example</i> .....    | 41 |
| <i>Errors</i> .....              | 42 |
| Task Result .....                | 42 |
| <i>Authorization</i> .....       | 43 |
| <i>Request guidelines</i> .....  | 43 |
| <i>Request examples</i> .....    | 43 |
| <i>Response guidelines</i> ..... | 44 |
| <i>Response example</i> .....    | 44 |
| <i>Errors</i> .....              | 45 |

## **Serial number and crypto code management** ..... 46

### **Crypto code and serialization APIs** ..... 48

#### **Serial Number Exchange Request & Response (XML)** ..... 48

|                                       |    |
|---------------------------------------|----|
| Serial Number Exchange Request .....  | 48 |
| <i>Guidelines</i> .....               | 48 |
| <i>Example</i> .....                  | 51 |
| <i>Errors</i> .....                   | 52 |
| Serial Number Exchange Response ..... | 52 |
| <i>Guidelines</i> .....               | 53 |
| <i>Example</i> .....                  | 58 |
| <i>Errors</i> .....                   | 59 |

#### **Serial Number Exchange Request & Response (SAP ATTP)** ..... 60

|                                      |    |
|--------------------------------------|----|
| Serial Number Exchange Request ..... | 60 |
| <i>Guidelines</i> .....              | 60 |



|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| <i>Example</i> .....                                                   | 61        |
| <i>Errors</i> .....                                                    | 62        |
| Serial Number Exchange Response .....                                  | 62        |
| <i>Guidelines</i> .....                                                | 62        |
| <i>Example</i> .....                                                   | 64        |
| <i>Errors</i> .....                                                    | 66        |
| <b>Serial Number Request &amp; Response (SOAP)</b> .....               | <b>67</b> |
| Serial Number Request .....                                            | 67        |
| <i>Guidelines</i> .....                                                | 67        |
| <i>Example</i> .....                                                   | 69        |
| <i>Errors</i> .....                                                    | 70        |
| Serial Number Response .....                                           | 71        |
| <i>Guidelines</i> .....                                                | 71        |
| <i>Example</i> .....                                                   | 74        |
| <b>Serial Number Manager Request and Response (Verify Brand)</b> ..... | <b>75</b> |
| Serial Number Manager Request .....                                    | 75        |
| <i>Guidelines</i> .....                                                | 75        |
| <i>Example</i> .....                                                   | 77        |
| <i>Errors</i> .....                                                    | 78        |
| Serial Number Manager Response .....                                   | 79        |
| <i>Guidelines</i> .....                                                | 79        |
| <i>Example</i> .....                                                   | 83        |
| <i>Errors</i> .....                                                    | 84        |
| Remove crypto codes APIs .....                                         | 87        |
| <b>Remove Crypto Codes (SOAP)</b> .....                                | <b>87</b> |
| Remove Crypto Codes Request .....                                      | 87        |
| <i>Guidelines</i> .....                                                | 87        |
| <i>Example</i> .....                                                   | 88        |

|                                                            |            |
|------------------------------------------------------------|------------|
| <i>Errors</i> .....                                        | 89         |
| Remove Crypto Codes Response .....                         | 89         |
| <i>Guidelines</i> .....                                    | 89         |
| <i>Example</i> .....                                       | 90         |
| <b>Fetch Remove Crypto Codes Result (SOAP)</b> .....       | <b>91</b>  |
| Fetch Remove Crypto Codes Result Request .....             | 91         |
| <i>Guidelines</i> .....                                    | 91         |
| <i>Example</i> .....                                       | 91         |
| <i>Errors</i> .....                                        | 92         |
| Fetch Remove Crypto Codes Result Response .....            | 92         |
| <i>Guidelines</i> .....                                    | 92         |
| <i>Example</i> .....                                       | 93         |
| <b>Manufacturing and packaging</b> .....                   | <b>95</b>  |
| Product release APIs .....                                 | 97         |
| <b>Product Release (XML)</b> .....                         | <b>97</b>  |
| Guidelines .....                                           | 97         |
| Example .....                                              | 100        |
| Errors .....                                               | 101        |
| <b>Product Release Event (EPCIS v1.2)</b> .....            | <b>103</b> |
| Guidelines .....                                           | 103        |
| Example .....                                              | 138        |
| Errors .....                                               | 145        |
| <b>Release Product Request &amp; Response (SOAP)</b> ..... | <b>150</b> |
| Release Product Request .....                              | 150        |
| <i>Guidelines</i> .....                                    | 150        |
| <i>Example</i> .....                                       | 152        |
| <i>Errors</i> .....                                        | 153        |



|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Release Product Response .....                                      | 154        |
| <i>Guidelines</i> .....                                             | 154        |
| <i>Example</i> .....                                                | 155        |
| End of Batch APIs .....                                             | 156        |
| <b>End of Batch (XML)</b> .....                                     | <b>156</b> |
| Guidelines .....                                                    | 156        |
| Examples .....                                                      | 158        |
| <i>Internal Material Code and Packaging Item Code Example</i> ..... | 158        |
| <i>Internal Material Code and Company Prefix Example</i> .....      | 159        |
| <i>Country Drug Code and Packaging Item Code Example</i> .....      | 160        |
| <i>Country Drug Code and Company Prefix Example</i> .....           | 160        |
| Errors .....                                                        | 161        |
| <b>End of Batch Event (EPCIS v1.2)</b> .....                        | <b>163</b> |
| Guidelines .....                                                    | 163        |
| Example .....                                                       | 201        |
| Errors .....                                                        | 209        |
| Aggregation APIs .....                                              | 215        |
| <b>ESM Aggregation (EPCIS v1.2)</b> .....                           | <b>215</b> |
| Guidelines .....                                                    | 215        |
| Example .....                                                       | 220        |
| Errors .....                                                        | 222        |
| <b>Aggregate (SOAP)</b> .....                                       | <b>223</b> |
| Aggregate Request .....                                             | 223        |
| <i>Guidelines</i> .....                                             | 223        |
| <i>Example</i> .....                                                | 225        |
| <i>Errors</i> .....                                                 | 225        |
| Aggregate Response .....                                            | 226        |

|                                              |            |
|----------------------------------------------|------------|
| <i>Guidelines</i> .....                      | 226        |
| <i>Example</i> .....                         | 227        |
| <b>Aggregation Update (XML)</b> .....        | <b>227</b> |
| Guidelines .....                             | 227        |
| Example .....                                | 233        |
| Errors .....                                 | 236        |
| <b>Aggregation Update (EPCIS v1.2)</b> ..... | <b>239</b> |
| Guidelines .....                             | 239        |
| Example .....                                | 246        |
| Errors .....                                 | 251        |
| <b>Aggregation Update (SOAP)</b> .....       | <b>253</b> |
| Aggregation Update Request .....             | 253        |
| <i>Guidelines</i> .....                      | 253        |
| <i>Example</i> .....                         | 257        |
| <i>Errors</i> .....                          | 258        |
| Aggregation Update Response .....            | 258        |
| <i>Guidelines</i> .....                      | 258        |
| <i>Example</i> .....                         | 259        |
| <b>Disaggregation APIs</b> .....             | <b>260</b> |
| <b>ESM Disaggregate (EPCIS v1.2)</b> .....   | <b>260</b> |
| Guidelines .....                             | 260        |
| Example .....                                | 264        |
| Errors .....                                 | 265        |
| <b>Disaggregate (SOAP)</b> .....             | <b>267</b> |
| Disaggregation Request .....                 | 267        |
| <i>Guidelines</i> .....                      | 267        |
| <i>Example</i> .....                         | 269        |
| <i>Errors</i> .....                          | 269        |

|                                               |            |
|-----------------------------------------------|------------|
| Disaggregation Response .....                 | 270        |
| <i>Guidelines</i> .....                       | 270        |
| <i>Example</i> .....                          | 271        |
| <b>Aggregation Update (XML) .....</b>         | <b>271</b> |
| Guidelines .....                              | 271        |
| Example .....                                 | 277        |
| Errors .....                                  | 280        |
| <b>Aggregation Update (EPCIS v1.2) .....</b>  | <b>282</b> |
| Guidelines .....                              | 282        |
| Example .....                                 | 290        |
| <b>Aggregation Update (SOAP) .....</b>        | <b>295</b> |
| Aggregation Update Request .....              | 295        |
| <i>Guidelines</i> .....                       | 295        |
| <i>Example</i> .....                          | 299        |
| <i>Errors</i> .....                           | 300        |
| Aggregation Update Response .....             | 300        |
| <i>Guidelines</i> .....                       | 300        |
| <i>Example</i> .....                          | 301        |
| Errors .....                                  | 302        |
| <b>Take sample .....</b>                      | <b>304</b> |
| Take sample APIs .....                        | 306        |
| <b>Take Product Sample (XML) .....</b>        | <b>306</b> |
| Guidelines .....                              | 306        |
| Example .....                                 | 309        |
| Errors .....                                  | 310        |
| <b>Take Product Sample (EPCIS v1.2) .....</b> | <b>311</b> |
| Guidelines .....                              | 311        |



|                                                     |            |
|-----------------------------------------------------|------------|
| Example .....                                       | 316        |
| Errors .....                                        | 317        |
| <b>Take Product Sample Event (EPCIS v1.2) .....</b> | <b>319</b> |
| Guidelines .....                                    | 319        |
| Example .....                                       | 324        |
| Errors .....                                        | 325        |
| <b>ESM Take Product Sample (EPCIS v1.2) .....</b>   | <b>327</b> |
| Guidelines .....                                    | 327        |
| Example .....                                       | 332        |
| Errors .....                                        | 333        |
| <b>Take Product Sample (SOAP) .....</b>             | <b>335</b> |
| Take Product Sample Request .....                   | 335        |
| Guidelines .....                                    | 335        |
| Example .....                                       | 337        |
| Errors .....                                        | 337        |
| Take Product Sample Response .....                  | 338        |
| Guidelines .....                                    | 338        |
| Example .....                                       | 339        |
| <b>Shipment .....</b>                               | <b>340</b> |
| Send shipment APIs .....                            | 342        |
| <b>Sales Shipment (XML) .....</b>                   | <b>342</b> |
| Guidelines .....                                    | 342        |
| Example .....                                       | 369        |
| Errors .....                                        | 373        |
| <b>Sales Shipment (EPCIS v1.2) .....</b>            | <b>383</b> |
| Guidelines .....                                    | 383        |
| Example .....                                       | 404        |

|                                             |            |
|---------------------------------------------|------------|
| Errors .....                                | 411        |
| <b>Shipment Event (EPCIS v1.2) .....</b>    | <b>418</b> |
| Guidelines .....                            | 418        |
| Example .....                               | 462        |
| Errors .....                                | 469        |
| <b>ESM Shipment (XML) .....</b>             | <b>489</b> |
| Guidelines .....                            | 489        |
| Example .....                               | 515        |
| Errors .....                                | 520        |
| <b>ESM Shipment (EPCIS v1.2) .....</b>      | <b>527</b> |
| Guidelines .....                            | 527        |
| Example .....                               | 555        |
| Errors .....                                | 563        |
| <b>Void shipment APIs .....</b>             | <b>572</b> |
| <b>Void Shipment (XML) .....</b>            | <b>572</b> |
| Guidelines .....                            | 572        |
| Example .....                               | 575        |
| Errors .....                                | 576        |
| <b>Void Shipment (EPCIS v1.2) .....</b>     | <b>577</b> |
| Guidelines .....                            | 577        |
| Example .....                               | 588        |
| Errors .....                                | 590        |
| <b>ESM Void Shipment (EPCIS v1.2) .....</b> | <b>591</b> |
| Guidelines .....                            | 591        |
| Example .....                               | 601        |
| Errors .....                                | 603        |
| <b>Void Shipment (SOAP) .....</b>           | <b>604</b> |

|                                                 |            |
|-------------------------------------------------|------------|
| Void Shipment Request .....                     | 604        |
| <i>Guidelines</i> .....                         | 605        |
| <i>Example</i> .....                            | 607        |
| <i>Errors</i> .....                             | 608        |
| Void Shipment Response .....                    | 608        |
| <i>Guidelines</i> .....                         | 609        |
| <i>Example (Success)</i> .....                  | 609        |
| <i>Example (Error)</i> .....                    | 610        |
| <b>Customs clearance .....</b>                  | <b>611</b> |
| Customs clearance APIs .....                    | 613        |
| <b>Country Clearance (XML) .....</b>            | <b>613</b> |
| Guidelines .....                                | 613        |
| Example .....                                   | 618        |
| Errors .....                                    | 622        |
| <b>Country Clearance (EPCIS v1.2) .....</b>     | <b>626</b> |
| Guidelines .....                                | 626        |
| Example .....                                   | 633        |
| Errors .....                                    | 637        |
| <b>ESM Country Clearance (EPCIS v1.2) .....</b> | <b>640</b> |
| Guidelines .....                                | 640        |
| Example .....                                   | 648        |
| Errors .....                                    | 651        |
| <b>Receipt .....</b>                            | <b>655</b> |
| Receipt APIs .....                              | 657        |
| <b>Receipt (XML) .....</b>                      | <b>657</b> |
| Guidelines .....                                | 657        |

|                                         |            |
|-----------------------------------------|------------|
| Example .....                           | 681        |
| Errors .....                            | 685        |
| <b>Receipt (EPCIS v1.2) .....</b>       | <b>697</b> |
| Guidelines .....                        | 697        |
| Example .....                           | 712        |
| Errors .....                            | 716        |
| <b>Receipt Event (EPCIS v1.2) .....</b> | <b>720</b> |
| Guidelines .....                        | 720        |
| Example .....                           | 737        |
| Errors .....                            | 742        |
| <b>ESM Receipt (XML) .....</b>          | <b>748</b> |
| Guidelines .....                        | 748        |
| Example .....                           | 773        |
| Errors .....                            | 777        |
| <b>ESM Receipt (EPCIS v1.2) .....</b>   | <b>782</b> |
| Guidelines .....                        | 782        |
| Example .....                           | 809        |
| Errors .....                            | 814        |
| <b>Market release .....</b>             | <b>825</b> |
| Market release APIs .....               | 827        |
| <b>Market Release (XML) .....</b>       | <b>827</b> |
| Guidelines .....                        | 827        |
| Example .....                           | 831        |
| Errors .....                            | 831        |
| <b>Market Release (SOAP) .....</b>      | <b>833</b> |
| Market Release Request .....            | 833        |



|                               |     |
|-------------------------------|-----|
| <i>Guidelines</i> .....       | 834 |
| <i>Example</i> .....          | 837 |
| <i>Errors</i> .....           | 838 |
| Market Release Response ..... | 839 |
| <i>Guidelines</i> .....       | 839 |
| <i>Example</i> .....          | 840 |

## **Decommissioning and destruction ..... 841**

### **Decommission and destruction APIs ..... 843**

#### **ESM Decommission (EPCIS v1.2) ..... 843**

|                  |     |
|------------------|-----|
| Guidelines ..... | 843 |
| Example .....    | 851 |
| Errors .....     | 853 |

#### **Decommission Event (EPCIS v1.2) ..... 856**

|                  |     |
|------------------|-----|
| Guidelines ..... | 856 |
| Example .....    | 864 |
| Errors .....     | 866 |

#### **Decommission (SOAP) ..... 869**

|                             |     |
|-----------------------------|-----|
| Decommission Request .....  | 869 |
| <i>Guidelines</i> .....     | 869 |
| <i>Example</i> .....        | 895 |
| <i>Errors</i> .....         | 896 |
| Decommission Response ..... | 897 |
| <i>Guidelines</i> .....     | 897 |
| <i>Example</i> .....        | 898 |

#### **ESM Destroy (EPCIS v1.2) ..... 899**

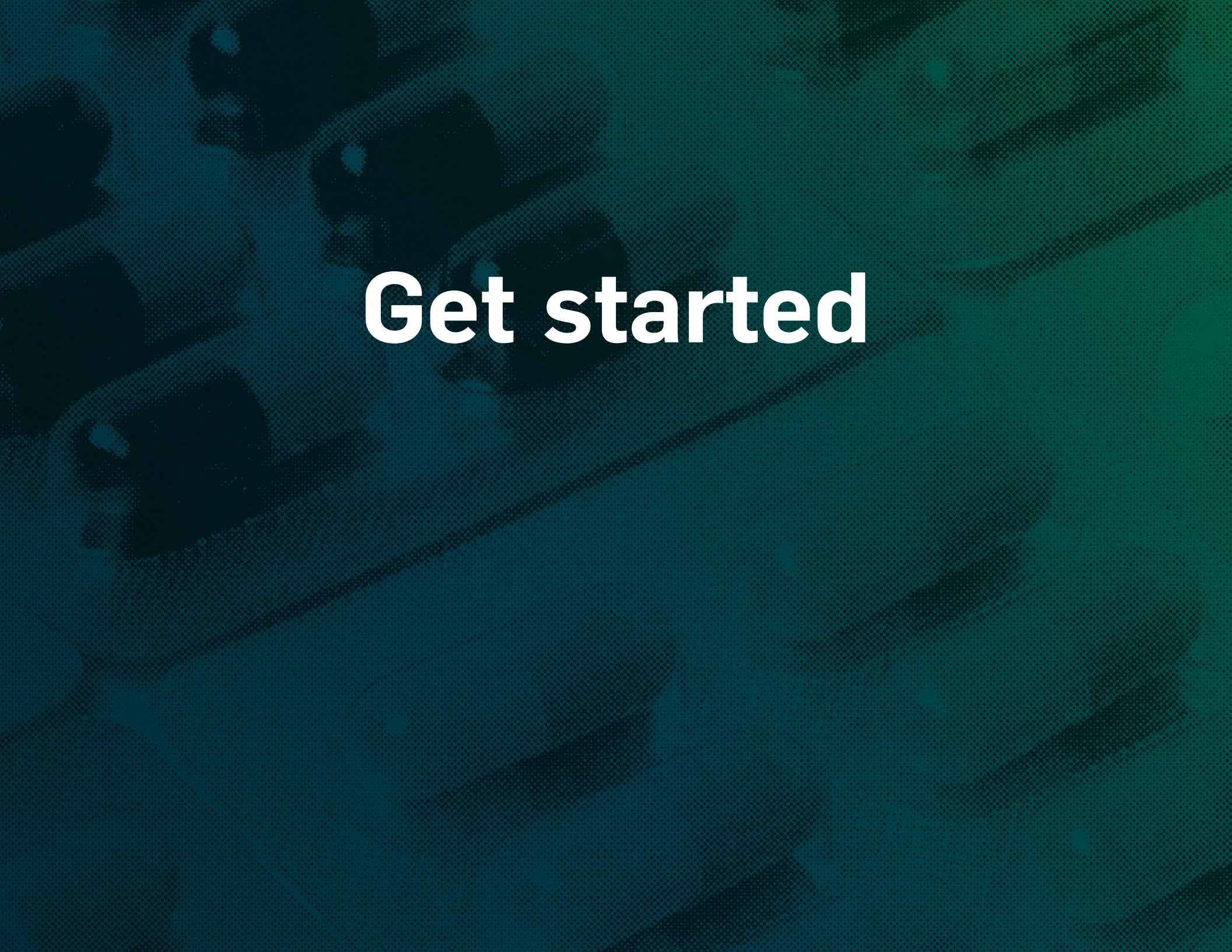
|                  |     |
|------------------|-----|
| Guidelines ..... | 899 |
| Example .....    | 907 |

|                                         |            |
|-----------------------------------------|------------|
| Errors .....                            | 909        |
| <b>Destroy Event (EPCIS v1.2) .....</b> | <b>911</b> |
| Guidelines .....                        | 911        |
| Example .....                           | 919        |
| Errors .....                            | 921        |
| <b>Destroy (SOAP) .....</b>             | <b>924</b> |
| Destroy Request .....                   | 924        |
| Guidelines .....                        | 924        |
| Example .....                           | 953        |
| Errors .....                            | 954        |
| Destroy Response .....                  | 955        |
| Guidelines .....                        | 955        |
| Example .....                           | 956        |
| <b>Enumerations .....</b>               | <b>957</b> |
| Aggregation .....                       | 958        |
| AggregationInspection .....             | 958        |
| DeliveryInspection .....                | 958        |
| PackagingLevel .....                    | 958        |
| PackedStatus .....                      | 959        |
| PackLevel .....                         | 960        |
| Company and location identifiers .....  | 961        |
| BusinessAndLocationId .....             | 961        |
| BusinessLookupId .....                  | 963        |
| IdentifierType .....                    | 965        |
| LocationIdType .....                    | 966        |
| LocationLookupId .....                  | 967        |

|                                                                                                                                            |             |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>MDBusinessPartyTypeAttributes</b>                                                                                                       | <b>968</b>  |
| <b>MDPartyTypeAttributes</b>                                                                                                               | <b>970</b>  |
| <b>MDPartyTypeEnum</b>                                                                                                                     | <b>972</b>  |
| <b>MessagePartyIdType</b>                                                                                                                  | <b>973</b>  |
| <b>Company and information</b>                                                                                                             | <b>975</b>  |
| <b>BusinessClassification</b>                                                                                                              | <b>975</b>  |
| <b>MDAttributes</b>                                                                                                                        | <b>975</b>  |
| <b>Country clearance</b>                                                                                                                   | <b>978</b>  |
| <b>CirculationReasonCode</b>                                                                                                               | <b>978</b>  |
| <b>ClearanceTransactionId</b>                                                                                                              | <b>978</b>  |
| <b>ClearanceType</b>                                                                                                                       | <b>979</b>  |
| <b>Event actions</b>                                                                                                                       | <b>980</b>  |
| <b>ActionType</b>                                                                                                                          | <b>980</b>  |
| <b>ISO codes</b>                                                                                                                           | <b>981</b>  |
| <b>ISOCountryCode</b>                                                                                                                      | <b>981</b>  |
| <b>ISOCurrency</b>                                                                                                                         | <b>991</b>  |
| <b>Item and packaging codes</b>                                                                                                            | <b>998</b>  |
| <b>CountryDrugCode</b>                                                                                                                     | <b>998</b>  |
| <b>ItemCode</b>                                                                                                                            | <b>999</b>  |
| <b>PackagingItemCodeType</b>                                                                                                               | <b>1000</b> |
| <b>Serial numbers</b>                                                                                                                      | <b>1001</b> |
| <b>Encoding</b>                                                                                                                            | <b>1001</b> |
| <b>EPC Pure Identifier Format Examples</b>                                                                                                 | <b>1001</b> |
| CN EDMC: <a href="http://epcis.tracelink.com/hc/cn-edmc/obj/[serial number]">http://epcis.tracelink.com/hc/cn-edmc/obj/[serial number]</a> | 1001        |
| NTIN: urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]                                                        | 1001        |

|                                                                                             |             |
|---------------------------------------------------------------------------------------------|-------------|
| SGTIN: urn:epc:id:sgtin:[company prefix].[indicator digit + item reference].[serial number] | 1002        |
| SSCC: urn:epc:id:sscc:[company prefix].[extension digit + serial number]                    | 1002        |
| <b>FilterValue</b>                                                                          | <b>1002</b> |
| <b>Format</b>                                                                               | <b>1002</b> |
| <b>Encoding</b>                                                                             | <b>1003</b> |
| Shipment and receipt                                                                        | 1004        |
| <b>ActionCode</b>                                                                           | <b>1004</b> |
| <b>ContractType</b>                                                                         | <b>1004</b> |
| <b>FundingSource</b>                                                                        | <b>1005</b> |
| <b>ReceiptDistributionType</b>                                                              | <b>1005</b> |
| <b>SalesDistType</b>                                                                        | <b>1005</b> |
| <b>SalesDistType (Receipt)</b>                                                              | <b>1006</b> |
| <b>SupplyType</b>                                                                           | <b>1006</b> |
| Status update                                                                               | 1009        |
| <b>DestructionMethod</b>                                                                    | <b>1009</b> |
| DestroyReasonCode                                                                           | 1010        |
| <b>DecommissionReasonCode</b>                                                               | <b>1010</b> |
| ReasonCode                                                                                  | 1012        |
| ReasonCodes                                                                                 | 1013        |
| <b>TakeSampleReasonCode</b>                                                                 | <b>1014</b> |
| Transaction identifiers                                                                     | 1015        |
| TransactionId                                                                               | 1016        |
| <b>TransactionId (Inbound)</b>                                                              | <b>1016</b> |
| <b>TransactionId (Outbound)</b>                                                             | <b>1017</b> |





# Get started

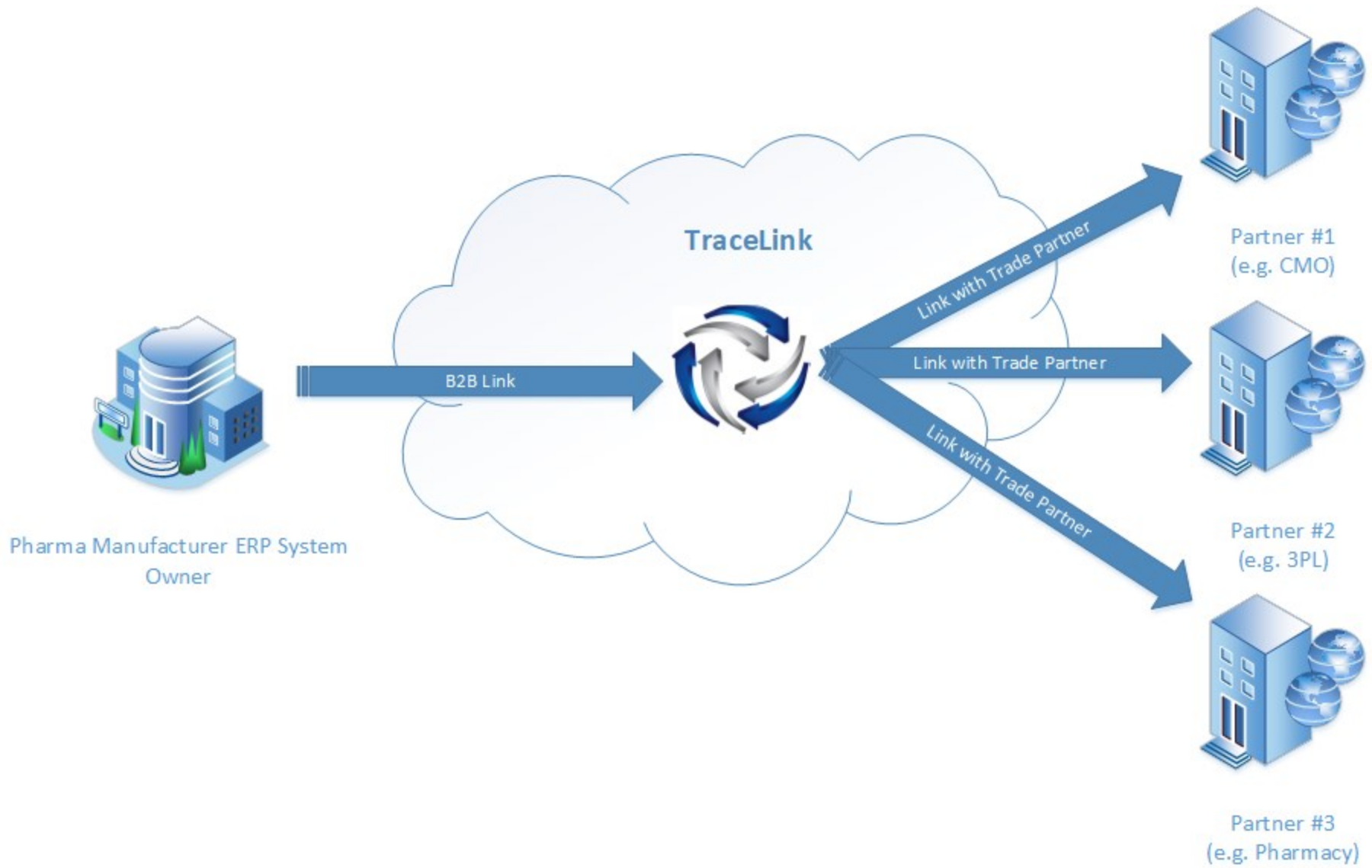


# Intro to asynchronous messages

TraceLink accepts a variety of file formats to ensure that messages between TraceLink Owners and their Partners are exchanged seamlessly. After integration is set up, when the Owner sends a message into TraceLink (targeted for a Partner) from their enterprise system, the message is sent in the Owner's preferred format. The message is translated (and stored) within TraceLink and is then reformatted into an outbound message for the Partner their preferred file format.

⚠ File size limit is 300mb for asynchronous messages sent inbound to TraceLink.





## Message Type and Info Exchange display name

The relevant Message Type (e.g. SOM\_DESTROY\_EVENT) and Info Exchange Display Name (e.g. Destroy Event) are included above each *Guidelines Table*. The Message Type is used when setting up B2B connections. Use the Info Exchange Display Name in Info Exchange to monitor and troubleshoot messages exchanged with Partners. See the *Info Exchange Online Help* for additional information.

How the Message Type is used depends on the type of B2B connection:

- AS2: The Message Type is in the AS2 header (e.g. SOM\_DESTROY\_EVENT).
- HTTP Post: The Message Type is part of the URL (e.g. [https://prodb2b.tracelink.com:5443/server?request=send&directory=inbox/SOM\\_DESTROY\\_EVENT&filename=<filename>](https://prodb2b.tracelink.com:5443/server?request=send&directory=inbox/SOM_DESTROY_EVENT&filename=<filename>)).
- SFTP: The Message Type is the folder in which the message is saved.

In Info Exchange Profiles, the Message Type is included in the "transaction" column of the Transactional Maps CSV file.

## Error messages

When configuring asynchronous messages, various errors may be encountered. These errors point to issues with message file validation, data configuration, duplicate files, adapter issues, authorization failures, or database look-up failures (such as look-ups for missing product master data attributes triggered by a look-up code in the file).

### Where are errors found in the UI?

Errors are found in the TraceLink UI in the *Info Exchange* app. Filter errors by error type under the *Processing Status* drop-down option. To display the actual error, select the hyperlinked error type associated with the designated message (see the image below for an example).

|                                                                                     | Date - Time            | Processing Code<br>Review Status | Output File Name | Output File Format | Actions |
|-------------------------------------------------------------------------------------|------------------------|----------------------------------|------------------|--------------------|---------|
|  | 28 Dec 2015 - 03:49 PM | Map in Failed<br>--              | --               | --                 | --      |

|                                                                                   | Date - Time            | Processing Code<br>Review Status | Output File Name                                       | Output File Format | Actions |
|-----------------------------------------------------------------------------------|------------------------|----------------------------------|--------------------------------------------------------|--------------------|---------|
|  | 22 Dec 2015 - 02:10 PM | Processing Failed<br>--          | --                                                     | --                 | --      |
|  | 08 Sep 2016 - 05:00 PM | Needs Investigation<br>--        | --                                                     | --                 | --      |
|  | 30 Apr 2014 - 08:04 PM | Map Out Failed<br>--             | --                                                     | --                 | --      |
|  | 24 Mar 2024 - 12:47 PM | Delivery Failed<br>--            | PickShipASN1490359607588.73875FIfH.738750bw4.73875nxTz | X12                | --      |

## What do the errors look like and how are they interpreted?

❗ The example below reflects a "Map In" error type with errors identified in both the "Input" and "Output" (see *Scope*).

The following information is useful for interpreting errors:

1. The *Scope* (indicated in red below) identifies whether the error is in the input or output.
2. The error message is defined by the *Description* (indicated in yellow below). This provides some context as to why the error occurred. The *Detail* fields may also prove useful when troubleshooting errors in submitted data.
3. Depending on the type of error, the *InputAddress*, *OutputAddress*, *InterfacePath*, and/or *Value* information identifies the full path to the field and instance of that field that triggered the error to assist with troubleshooting.

The following error examples illustrate what an error may look like in the TraceLink application:

MapInput:

ERRORS

ID: Input\_Presentation\_Mismatch

Severity: Error

Category: Input\_Data\_Error

Description: Cannot parse input data according to the presentation.

Scope: Input

Detail[Input Path]: SNXDispositionAssignedMessage | MessageBody | choice\_1[0] | CommissionEvent | CommissionEventDetail[0] | EventDateTime

Detail[Input Data]: 2015-04621T08:18:00.140Z

Detail[Type]: DateTime - General Characters & XML Schema

Detail[Presentation]: YYYY-MM-DDThh:mm:ss[.sss][-hh:mm] - 2003-06-15T13:20:00.000-05:00

Detail[Error Name]: Presentation\_Mismatch

InputAddress

InterfacePath: SNXDispositionAssignedMessage | MessageBody | choice\_1[0] | CommissionEvent | CommissionEventDetail[0] | EventDateTime

XPath:

ParentElement: false

Value: /SNXDispositionAssignedMessage/MessageBody[1]/snx:CommissionEvent[1]/snx:CommissionEventDetail[1]/cmn:EventDateTime[1]/EventDateTime

OutputAddress

XPath:

ParentElement: false

Value: /can:CanonicalSNXDispositionAssignedEventType/can:MessageBody[1]/can:CommissionEvent[1]/can:CommissionEventDetail[1]/cmn:EventDateTime[1]

ID: Empty\_Tag\_Creation\_For\_Output\_Field

Severity: Error

Category: Output\_Data\_Error

Description: An empty tag was created for a target field, but an empty tag is not valid data for the field.

**Scope: Output**

Detail[Output Path]: CanonicalSNXDispositionAssignedEventType | MessageBody | choice\_1[\*] | CommissionEvent | CommissionEventDetail[\*] | EventDateTime

Detail[Minimum Target Iteration Count]: 1

Detail[Actual Iteration Count]: 0

OutputAddress

InterfacePath: 1

XPath:

ParentElement: false

Value: /can:CanonicalSNXDispositionAssignedEventType/can:MessageBody[1]/can:CommissionEvent[1]/can:CommissionEventDetail[1]/cmn:EventDateTime[1]



## What are the different error types?

The following provides a brief description of each TraceLink error type:

### Map In Failed - Class 1 Errors

This is the first step in the validation process as a file is received by TraceLink. This error is most often caused when required data is either missing or incorrect. This failure indicates that the file was poorly structured (e.g. data elements are in an incorrect order) or contained other errors that prevented TraceLink from integrating and processing the file. These instances trigger schema validation errors. In short, this error indicates that an inbound message has failed data translation. Map In Failed and Map Out Failed may also point to system errors in the map call.

An inbound message is designed to convert an external party's data format to Tracelink's format. The external party sends data to Tracelink for data transformation, therefore Tracelink is the recipient of the data.

### Processing Failed - Class 2 Errors

This is considered the second step in the validation process and generally where all of the business logic is found. This error indicates a failure at any point in a transformation document life cycle (e.g. transmission failure or back end code failure).

### Map Out Failed

This step is when TraceLink maps the outbound data, converting it into the receiving party's preferred format. Sometimes the rules can vary based on the file format. This error indicates an outbound message has failed at some point in this data conversion process. Map In Failed and Map Out Failed can also point to system errors in the map call.

### Blocked

A blocked error indicates a system blockage or processing failure.

### Needs Investigation

This error indicates a processing error or message data translation failure. This error type requires investigation to determine the root of failure. Often, this error occurs when the system believes it is receiving a duplicate file.

① TraceLink does have the ability to push these errors through manually.

## What are the different error classes?

There are three classes of errors that are pertinent to asynchronous integration:

### Class 1 Errors

Class 1 errors are mapping validation errors. These errors fall under the "Map In" error type. This is where the data structure of the message is validated (e.g. where data type information or an element's required or optional requirement is validated. Map In errors are returned if there is an issue with this first validation step. For example, if a required field is omitted, a class 1 error results.

### Class 2 Errors

Class 2 errors are data translation errors which can be found in the "Processing Failed" category of errors. A Processing Failed error type indicates that the map failed to translate to TraceLink's internal format and therefore cannot hit the back end API. Think of this second step as an "integrity check" against the submitted data. For example, if a serial number is submitted but is assigned to an incorrect product code, an error results. Another example is if a certain event (such as Commission) is submitted, but the serial number included in that event is unrecognized, an error results. The following are some class 2 error examples:

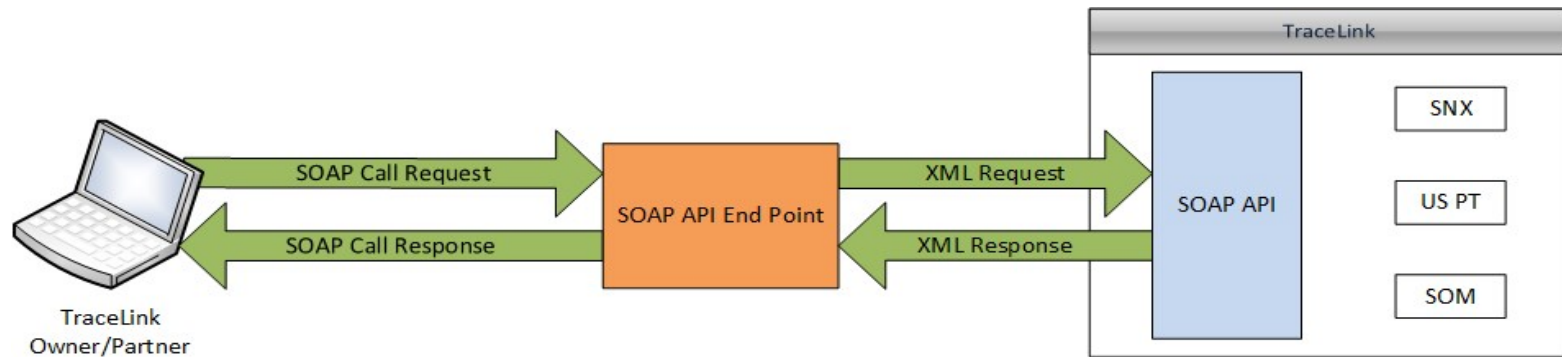
| System Validation                                                                                                       | Error                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Serial Number does not exist.                                                                                           | Serial number [Serial Number] does not exist.                                                                                                                                                                                                                                                          |
| Serial Number is associated to a company or location that differs from the company or location shown in Show Data from. | Location [Location Name] was not valid for serial number [Serial Number].                                                                                                                                                                                                                              |
| Serial Number has a parent.                                                                                             | Operation could not be performed because serial number (child serial number) and serial number (container serial number) are currently in different states or the operation would result in them having different states. Parent and child serial numbers are not permitted to be in different states. |
| Serial Number cannot be updated from its current state to the new state.                                                | Cannot perform operation on serial number [serial number] with item state/serial number state [item state/serial number state]. This operation can only be performed when: [List of item states separated by "or"].                                                                                    |

### Class 3 Errors

Class 3 errors occur when data translation to a third party (Trade Partner) fails due to an internal server error. Class 3 errors are rare, though they may still occur due to missing or incorrect information in the Master Data. The troubleshooting recommendation for Class 3 errors is to first check Master Data, make appropriate edits, and then resubmit the designated file. If Master Data is correctly configured, contact [Support](#) for further assistance.

# Intro to SOAP messages

TraceLink communicates with certain operating systems or programs of choice through SOAP (XML-based messaging protocol) integration. As indicated in the diagram below, the TraceLink applications that use the SOAP API are *Serialized Operations Manager*, *Serial Number Exchange*, and *Product Track*.



For example, if an internal system needs serial numbers, the `SerialNumberRequest` SOAP call is sent from that internal system to TraceLink's SOAP API endpoint, which is the main request-response communication hub. The endpoint simply extracts the XML from the `SerialNumberRequest` call and passes it to the TraceLink platform (the *Serial Number Exchange* app, in this example). *Serial Number Exchange* waits for the XML response containing the requested serial numbers, sends the serial number data back through the endpoint where the SOAP response generates, and sends the response back to the original system. This response also confirms whether the operation is successful or if it fails.

❗ Development platform installation is required prior to integration.

## Authentication

A valid TraceLink Network username and password for HTTP basic authentication validation is needed, as well as a user and app look-up to ensure proper validation of a given request.

❗ To enforce strong security in the TraceLink Track & Trace Services, username:password in plain text is not accepted. To successfully send SOAP calls to TraceLink, Base64 encoding must be used for the username:password and sent in the HTTP Authorization header to conform with the IETF basic authorization standard (<https://tools.ietf.org/html/rfc7617>).

An HTTP 401 Unauthorized client error status response code occurs in the following scenarios:

- A non-Base64 encoded username:password is sent in the HTTP Authorization header.
- A Base64-encoded or plain text username:password is sent in the Username header.
- The Username header is sent.

## App-specific authentication

- Serial Number Exchange requires basic authentication.
- Serialized Operations Manager requires basic authentication. TraceLink also allows the caller to pass a username (possibly a different username from the one used to authenticate), a location type, and location value for the purpose of executing a *Serialized Operations Manager* call. If these values are not provided, TraceLink executes the call at the company level.

| Header        | Usage                                                           | Sample Value                                              | Required                                                                  |
|---------------|-----------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------|
| User          | Use to identify a user making the request (for Audit purposes). | User email or GUID. Example: snxpubco1-mem1@tracelink.com | No. Value defaults to user used in authentication (basic authentication). |
| LocationType  | Use to identify location type executing the call.               | SGLN                                                      | No. If excluded, call is made at the Company level.                       |
| LocationValue | Use to identify location value executing the call.              | 12345.678.10                                              | No, unless LocationType is specified.                                     |

- Compliance Reporting requires basic authentication.

## WSDL access

Access to the Web Services Description Language (WSDL), where the XSDs reside along with other functionality information, is needed for integration. The URL for the WSDL contains the name of the TraceLink environment being accessed, followed by a specified app path. The following are itest WSDL examples by application:

- *Serial Number Exchange*: <https://itestapi.tracelink.com/soap/snx/snrequest?wsdl>
- *Serialized Operations Manager*: <https://itestapi.tracelink.com/soap/som?wsdl>

ⓘ Ensure authentication success before attempting to access the WSDL.

# SOAP API call limits

Before configuring data, query limitations should be noted. The table below outlines the query limitation details for TraceLink SOAP messages:

| API Call                               | Limit   | Description of Limit                                                                         |
|----------------------------------------|---------|----------------------------------------------------------------------------------------------|
| Serial Number Exchange Messages        |         |                                                                                              |
| serialNumberRequestResponse            | 500,000 | The maximum quantity of serial numbers that can be requested is 500,000.                     |
| Serialized Operations Manager Messages |         |                                                                                              |
| Commission                             | 50      | The maximum amount of serial numbers that can be commissioned is 50.                         |
| Decommission                           | 500     | The maximum amount of serial numbers that can be decommissioned is 500.                      |
| GetSerialNumberHierarchy               | 100000  | A maximum of 100,000 serial numbers can be returned with a GetSerialNumberHierarchy request. |
| SetSerialNumberStatus                  | 500     | The serial number status can be set for a maximum of 500 serial numbers.                     |



# Intro to REST messages

TraceLink communicates with certain operating systems and programs of choice through Representational State Transfer (REST) integration. If an internal system needs to query TraceLink for information, an API call is sent from that internal system to the TraceLink REST API endpoint, which is the main request-response communication hub. The TraceLink endpoint extracts the schema from the event call and passes it to the internal system.

Russia Compliance receives the response containing the requested details, routes the information back through the endpoint where the REST response generates, and sends the response back to the original system. This response also confirms whether or not the operation is successful.

## HTTP response status codes

Russia Compliance presents standard response codes to indicate whether or not a specific HTTP request was successful. Response status codes may include, but are not limited to, the following:

### Successful response

|     |                                                                                         |
|-----|-----------------------------------------------------------------------------------------|
| 200 | OK. The request was successful. For GET, this means that the resource has been fetched. |
|-----|-----------------------------------------------------------------------------------------|

### Redirect message

|     |                                                                                                                                             |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------|
| 307 | Temporary Redirect. The client must get the requested resource at another URI with the same HTTP method that was used in the prior request. |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------|

### Client error status codes

|     |                                                                                                                                             |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------|
| 400 | Bad Request. The server could not understand the request due to invalid syntax.                                                             |
| 401 | Unauthorized. The client is unauthenticated, not allowed access, and should re-request credentials.                                         |
| 403 | Forbidden. The request is valid and the client is authenticated, but the client is not allowed access rights to the content for any reason. |

|     |                                                                                                                                      |
|-----|--------------------------------------------------------------------------------------------------------------------------------------|
| 404 | Not Found. The server cannot find the requested item. This can also mean that the endpoint is valid but the resource does not exist. |
|-----|--------------------------------------------------------------------------------------------------------------------------------------|

## Server error status codes

Please contact Support if any of the following errors is encountered:

|     |                                                                                                         |
|-----|---------------------------------------------------------------------------------------------------------|
| 500 | Internal Server Error. The server has encountered an unknown error.                                     |
| 502 | Bad Gateway. The server is working as a gateway to handle the request and received an invalid response. |
| 503 | Service Unavailable. The server is not ready to handle the request.                                     |
| 504 | Gateway Timeout. The server is acting as a gateway and cannot get a response in time.                   |

# How to use this guide

## Read the guidelines table

The following columns are included in the guidelines table for each message. Some messages may not have every column.

- **Data Element** – This column indicates the source/element name included in the message.
- **Occurs** – This column indicates the minimum and maximum amount of times that the particular element may occur within the message. In the example above, the `cmn:FileDate` element must occur a minimum of once and may only occur up to once for the maximum occurrence as indicated by the "1...1". The "\*" character indicates this is an unlimited maximum occurrence.
- **Format** – This column indicates the element's data format type (such as String, Integer, Boolean, Date, or Time).
- **Length** – This column indicates the length of the value for the given element. For the `cmn:FileDate` element above, the value must have at least one character, but does not have a maximum restriction (therefore can be any length). However, be mindful of the description column, as further criteria may be indicated that impacts the field length (e.g. serial number formatting).
- **Enums** – Certain fields are restricted to specified enumeration values. A link to the enumerations and their definitions is provided in this column. For example, `cmn:DeliveryNumber` | **@type** has *LocationId* enumeration values.
- **Req** – Each table indicates whether the element is required for the message. Use the key below to interpret the information in this column:
  - **C = Conditional:** A "C" indicates that this element is contingent on other factors. For example, an element could be required for the U.S. but not for any other country. Therefore the element's requirements are contingent on location. Another conditional scenario is that an element may be mandatory, but only if another related element is present.

ⓘ If indicated as "C", read the "Description" column as conditional values may actually be mandatory depending on use case.

- **M = Mandatory:** An "M" indicates the element must be included in the message.
- **O = Optional:** An "O" indicates that a element may be included in the message but is not required.
- **Description** – Any important notes regarding this section of the message are included here (country requirements, formatting notes, etc.) along with a brief description of the element.

⚠ The order of elements in a message must match the message guidelines



# **MDLP credential management**





# MDLP credential management APIs

Russia Compliance supports exportable and non-exportable certificates to digitally sign reports that are submitted to MDLP.

Owners who use exportable certificates can use the [credentials API](#).

If Owners who use non-exportable certificates choose to build their own app to digitally sign reports, they must integrate with the [Report retrieval APIs](#). Owners can also use the TraceLink-provided Russia Report Signature Appender app to digitally sign reports without any integration. See [Retrieve non-exportable certificates for domestic credentials](#) for more information.

## Digital Certificate Upload (REST)

### Digital Certificate Upload request

#### Authentication

Owners who choose to use exportable certificates for domestic MDLP credentials must use the Web UI and the [Digital Certificate Upload REST API](#). Administrators use the Web UI to configure the app and the REST API to upload digital certificates to a secure TraceLink server in Russia, which MDLP requires for domestic credentials.

An IT professional uses the following message to finish configuring exportable domestic credentials for MDLP by uploading a digital certificate to a secure TraceLink server in Russia, which MDLP requires for domestic credentials. The upload can be completed using a curl command on a computer with a UNIX or Windows 10 operating system.

A TraceLink Administrator must generate the ruconnectorToken (i.e. security token) for the message in the Administration [Web UI](#) when they enter the domestic credentials.



The security token is valid for 30 minutes after generation.

Use a **Post** curl command to the following URL:

- **itest** – <https://itest-upload.ru1.tracelink.com/api/credentials>
- **prod** – <https://upload.ru1.tracelink.com/api/credentials>



Include a **Content-Type** header key-value pair with a value of `multipart/form-data` in the curl command.

## Guidelines

| Data Element     | Occurs Length | Type   | Description                                                                                                                       |
|------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------|
| ruconnectorToken | 1...1<br>1/36 | String | <b>Required.</b> The TraceLink provided value when saving credentials for a domestic account. This token is valid for 30 minutes. |
| password         | 1...1<br>-    | String | <b>Required.</b> The password for the digital signature.                                                                          |
| file             | 1...1<br>-    | String | <b>Required.</b> The location on the local computer where the digital signature is located. Include @ before the file name.       |

## Example

```
1 | curl -i -X POST -H "Content-Type: multipart/form-data" -F "ruconnectorToken=0c382d0e-bcd7-4ed7-b502-a1210bb529f9" -F "password=pfx_
password" -F "file=@credentials.pfx" https://itest-upload.ru1.tracelink.com/api/credentials
```

## Errors

There are no errors for in this request. See the Digital Certificate Upload response for examples of a successful and failed response.

## Digital Certificate Upload response

### Guidelines

There are no elements in this response.

## Example - Success

---

```
1 HTTP/1.1 100 Continue
2 HTTP/1.1 201 Created
3 Date: Wed, 26 Feb 2020 19:44:33 GMT
4 Content-Length: 0
```

## Example - Failure

---

```
1 HTTP/1.1 100 Continue
2 HTTP/1.1 400 Bad Request
3 Date: Fri, 28 Feb 2020 14:49:20 GMT
4 Content-Type: text/plain
5 Content-Length: 30
6 Ru Connector Token has expired
```

# Report retrieval APIs

---

Owners can build their own app to retrieve reports by using the following APIs in this order:

## Tokens

Use this message to retrieve the token provided by TraceLink to use in the Tasks and Task Result APIs. The token is valid for 600 minutes i.e. 10 hours. The User ID and Password are provided when Administrators [configure Russia Compliance](#).

## Authentication

---

Use a **POST** curl command to the following URL:

- **itest** – <https://itest-upload.ru1.tracelink.com/api/token>
- **prod** – <https://upload.ru1.tracelink.com/api/token>

Include a **Content-Type** header key-value pair with a value of `application/json` in the curl command.

## Request guidelines

| Data Element | Type   | Description                                                                                                                                   |
|--------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| userId       | String | <b>Required.</b> The TraceLink-provided value when saving credentials for a domestic account using the Certificate Digest and Certificate ID. |
| password     | String | <b>Required.</b> The TraceLink-provided value when saving credentials for a domestic account using the Certificate Digest and Certificate ID. |

## Request examples

### Curl

```
1 curl --location "https://qe-upload.ru1.tracelink.com/api/token" ^
2 --header "Content-Type: application/json" ^
3 --data '{"userId":"m?Hw!8InPM%sd44K","password":"N(1^dQ6Q#(x#pj<I"}'
```

### JSON

```
1 {
2   "userId": "i0lNgFiBQ9WurPil",
3   "password": "!SnuBb0AwR)Yizw="
4 }
```

## Response guidelines

| Data Element   | Type   | Description                                                                                                           |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------|
| token          | String | The token that is obtained for a User ID and Password combination, and must be used in the Task and Task Result APIs. |
| lifeTime       | String | The validity of the token in minutes. Default value is 600 minutes.                                                   |
| certThumbprint | String | The Thumbprint credentials that are configured for MDLP.                                                              |
| errorMessage   | String | Displays an error message for a failed authentication.                                                                |

## Response example

## Success

```
1 {
2   "token":
3     "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJjb2lwYW55SWQ0IiwzMl1Njk1Yi1kODJlLTRkMmQtODVmOC01NTZhMjFhZjJlNDkiLCJwYXNzd29yZCI6IiFTTnVCYk9Bd1IpW
4     wL6dz0iLCJsb2NhdGlvbklkIjoizGYxNmZjOTQtYmZsN0NmI0LThmY2EtMjNiZmZ0TNjYwMyIiwiaXhwIjozNzE4OTgxNjc0LCJ1c2VySWQ0IjPmGxOZ0ZpQlE5V3VyUGlsIn
5     0.-K661S6UNWJNUofbODziSotb0rYbAahzQjBLcuHgXbc",
6   "lifeTime": 600,
7   "certThumbprint": "cba7cccb875295fa94ab411fc2c614a95f94684"
8 }
```

## Failure

```
1 {
2   "errorMessage": "Authentication failed. Please check your user ID and password, or ensure all required keys are provided."
3 }
```

## Errors

| Element  | Error Message                                                                                            | Description                                                     |
|----------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| User ID  | Authentication failed.                                                                                   | The error occurs if the user ID is incorrect.                   |
|          | Authentication failed. Please check your user ID and password, or ensure all required keys are provided. | The error occurs if either user ID or password is not provided. |
| Password | Authentication failed.                                                                                   | The error occurs if the password is incorrect.                  |
|          | Authentication failed. Please check your user ID and password, or ensure all required keys are provided. | The error occurs if either user ID or password is not provided. |

## Tasks

Use this message to retrieve up to 5 reports that require a signature. The reports must be signed and returned with the Task Result API while the token is still valid (i.e. within 600 minutes of retrieving the token).

## Authorization

Use a **GET** curl command to the following URL:

- **itest** – `https://itest-upload.ru1.tracelink.com/api/tasks`
- **prod** – `https://upload.ru1.tracelink.com/api/tasks`

Include a **Content-Type** header key-value pair with a value of `application/json` in the curl command.

Include an authorization `token` header value with the token provided by TraceLink in the Token's response.

This request does not include any elements in the payload.

## Request example

```
1 | curl --location "https://itest-upload.ru1.tracelink.com/api/tasks" ^
```



```

2 | --header ""Authorization":
  | "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJjb21wYW55SWQiOiIwZmI1Njk1Yi1kODJlLTRkMmQtODVmOC01NTZhMjFhZj1jNDkiLCJsb2NhZGlvbklkIjoimDAwMDAwMDAxMjE0MzUiLCJleHAiOjE3MjA3NDA4Mzd9.3TXEOR6B1AJd9hwMKU3y1Gy6OmSj_U_d_E0s2aYewBo""

```

## Response guidelines

| Data Element                   | Type   | Description                                                                                                                                                                                                                                       |
|--------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| taskList                       | String | <b>Required.</b> The Russia Compliance reports that require a signature. The signed reports must be returned with the Task Result request in the same order as they are provided in this response.                                                |
| taskId                         | String | Unique identifier for each report.                                                                                                                                                                                                                |
| signingTaskContentPreSignedUrl | String | Presigned URL of the request file that needs to be signed before submitting to the MDLP and responded with the <code>taskId</code> as primary identifier for the Task Result endpoint.                                                            |
| signatureType                  | String | The signature type for the report. Valid values: <ul style="list-style-type: none"> <li><code>Attached</code> - The signature is attached to the report.</li> <li><code>Detached</code> - The signature is not attached to the report.</li> </ul> |
| signingPayload                 | String | Token to be signed in case the <code>taskId</code> is <code>mdlp_token_request</code> or <code>oms_token_request</code> .                                                                                                                         |
| errorMessage                   | String | Displays if the token is invalid.                                                                                                                                                                                                                 |
| errorCode                      | String | Displays if the token is invalid.                                                                                                                                                                                                                 |

## Response example

```

1 | {
2 |   taskList: [
3 |     {
4 |       "taskId": "mdlp_token_request",
5 |       "signatureType": "DETACHED",

```

```

6      "signingPayload": "ff344de4-da5d-41e6-96db-e5b578ab85eb"
7    },
8    {
9      "taskId": "oms_token_request",
10     "signatureType": "DETACHED",
11     "signingPayload": "e7a0d24d-d50a-4d06-be8f-de2e5b2911c1"
12   },
13   {
14     "taskId": "1720103193_297942f6-8b41-46f4-b163-df6748a4fd57",
15     "signingTaskContentPreSignedUrl": "https://<aws_path>/russia-pharma-compliance/non-export-cert-signing-
documents/credentialId%3D0fb5695b-d82e-4d2d-85f8-556a21af9c49_00000000121435/reports-request/1720103193_297942f6-8b41-46f4-b163-
df6748a4fd57?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Date=20240704T142657Z&X-Amz-SignedHeaders=host&X-Amz-Expires=3599&X-Amz-
Credential=AKIAU7PFTQKSM3KZKXWJ%2F20240704%2Feu-central-1%2Fs3%2Faws4_request&X-Amz-
Signature=60c4f812379cc802d4183f7692650ee55ff50f8db692bec9d284e2c6b2cebfe4",
16     "signatureType": "DETACHED"
17   },
18   {
19     "taskId": "1720077318_075341e1-886f-4e7c-9f43-43d4aec71bd1",
20     "signatureType": "https://<aws_path>/russia-pharma-compliance/non-export-cert-signing-documents/credentialId%3D0fb5695b-d82e-4d2d-85f8-
556a21af9c49_00000000121435/reports-request/1720077318_075341e1-886f-4e7c-9f43-43d4aec71bd1?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-
Date=20240704T071904Z&X-Amz-SignedHeaders=host&X-Amz-Expires=3599&X-Amz-Credential=AKIAU7PFTQKSM3KZKXWJ%2F20240704%2Feu-central-
1%2Fs3%2Faws4_request&X-Amz-Signature=fe5f943d81c429bd64a213293c1698c391a30514b6063bf9f2e977a5f9442ff8",
21     "signatureType": "DETACHED"
22   }
23 ]
24 }

```

## Errors

| Element       | Error Message           | Description                                                                 |
|---------------|-------------------------|-----------------------------------------------------------------------------|
| Authorization | Authentication Failure. | The error occurs if the token provided in the header is invalid or expired. |

## Task Result

Use this message to return the signed reports to Russia Compliance. Each request can only contain one report at a time

## Authorization

Use a **POST** curl command to the following URL:

- **itest** – <https://itest-upload.ru1.tracelink.com/api/taskResult>
- **prod** – <https://upload.ru1.tracelink.com/api/taskResult>

Include a **Content-Type** header key-value pair with a value of `application/json` in the curl command.

Include an authorization `token` header value with the token provided by TraceLink in the Token's response.

## Request guidelines

| Data Element     | Type   | Description                                                                                                                                                                                                                                       |
|------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| signedData       | String | <b>Required.</b> The <code>signingPayload</code> or <code>signingTaskContentPreSignedUrl</code> from the Task response that identifies the report.                                                                                                |
| taskId           | String | <b>Required.</b> The unique identifier of the report from the Task response.                                                                                                                                                                      |
| status           | String | <b>Required.</b> The status of the digital signature. Valid values: <ul style="list-style-type: none"> <li>• <code>SUCCESS</code> - The report is signed successfully.</li> <li>• <code>ERROR</code> - The report could not be signed.</li> </ul> |
| signingPayload   | String | <b>Optional.</b> The <code>signingPayload</code> from the Task response that identifies the report.                                                                                                                                               |
| errorCode        | String | Required if the status is <code>ERROR</code> . Valid value is <code>INTERNAL_FAILURE</code> .                                                                                                                                                     |
| errorDescription | String | Required if the status is <code>ERROR</code> . The description of the error.                                                                                                                                                                      |

## Request examples

```

1 | {
2 |   "signedData": "<signedValue>",

```

```
3  "taskId": "1720112492_b6ec24af-dbb4-4e75-ad0d-475d6625aa0b_2",
4  "status": "SUCCESS"
5  }
```

```
1  {
2  "signedData": "<signedValue>",
3  "signingPayload": "e7a0d24d-d50a-4d06-be8f-de2e5b2911c1",
4  "taskId": " oms_token_request",
5  "status": "SUCCESS"
6  }
```

## Response guidelines

If the request is successful, there is no response payload. The following elements are only returned if an error occurs.

| Data Element | Type   | Description                                                                                                                                                                          |
|--------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| errorMessage | String | The description of the error that occurred.                                                                                                                                          |
| errorCode    | String | The error code. Valid values: <ul style="list-style-type: none"><li>101 - Authentication failure.</li><li>105 - The payload of the request exceeded the maximum 5KB limit.</li></ul> |

## Response example

```
1  {
2  "errorMessage": "Payload size exceeds the configured maximum limit (in KB): 5",
3  "errorCode": 105
}
```

4 | }

Errors

| Element              | Error Message                                                  | Description                                                                        |
|----------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------|
| Authorization        | Authentication Failure                                         | The error occurs if the token provided in the header is invalid or expired.        |
| Request message size | Payload size exceeds the configured maximum limit (in KB): [5] | The error occurs if the payload size exceeds the configured maximum limit of 5 KB. |



# **Serial number and crypto code management**





# Crypto code and serialization APIs

Use the following request and response messages to fetch a certain quantity of serial numbers in the appropriate format when serializing product on the packaging line. The request message specifies the information that is needed, and the response message returns the serial numbers and associated crypto codes, if applicable. The serial numbers can then be added to products on the packaging line.

## Serial Number Exchange Request & Response (XML)

### Serial Number Exchange Request

#### Guidelines

**Message Type:** SNX\_REQUEST

**Info Exchange Display Name:** Serial Number Request

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element          |                       |                        | Occurs<br>Length | Type   | Description                                                                |
|-----------------------|-----------------------|------------------------|------------------|--------|----------------------------------------------------------------------------|
| snx:SNXRequestMessage |                       |                        | 1...1<br>-       | -      | <b>Required.</b> Root element of message.                                  |
|                       | snx:ControlFileHeader |                        | 1...1<br>-       | -      | <b>Required.</b> XML file control header record.                           |
|                       |                       | cmn:FileSenderNumber   | 1...1<br>1/10    | String | <b>Required.</b> File sender's company identifier (e.g. 7777776067344).    |
|                       |                       | cmn:FileReceiverNumber | 1...1<br>1/10    | String | <b>Required.</b> File recipient's company identifier (e.g. 8888884043588). |

| Data Element |  |                        | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|------------------------|----------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:FileControlNumber  | 1...1<br>1/*   | String | <b>Required.</b> Unique file control ID number (e.g. 0000000001).                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  | cmn:FileDate           | 1...1<br>10/10 | Date   | <b>Required.</b> Date file generated in XML YYYY-MM-DD format (e.g. 2012-06-30).                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  | cmn:FileTime           | 1...1<br>8/8   | Time   | <b>Required.</b> Time file generated in XML HH:MM:SSZ format (e.g. 06:30:32Z).                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  | snx:MessageBody        | 1...1<br>-     | -      | <b>Required.</b> XML file control header record.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  | cmn:RequestId          | 1...1<br>1/*   | String | <b>Required.</b> Unique identifier for the serial number request. This is used to link the serial number response from Serial Number Manager back to the originating serial number request (e.g. 20120630083253).                                                                                                                                                                                                                                                                                                      |
|              |  | cmn:PlantLocationId    | 1...1<br>1/34  | String | <b>Required.</b> The SGLN of the plant that is requesting the serial numbers. This is required by the Serial Number Manager application to track the plant that commissioned the serial numbers. SGLN format is the decimal separated numeric component only, with the urn prefix stripped away (e.g. <company prefix>.<location reference>.<extension> 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events).                                                                   |
|              |  | cmn:ReferenceDocuments | 0...1<br>-     | -      | References specific manufacturing orders associated with the serial number request. Indicates that the requested serial numbers will be used for the referenced manufacturing orders.                                                                                                                                                                                                                                                                                                                                  |
|              |  | cmn:PONumber           | 1...1<br>1/20  | String | <b>Required.</b> Purchase Order (PO) number associated with serial number request (e.g. 1001764).                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  | cmn:POLine             | 1...1<br>1/5   | String | <b>Required.</b> PO line number associated with serial number request (e.g. 001).                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  | cmn:WorkOrderNumber    | 0...1<br>1/20  | String | Work Order number associated with serial number request (e.g. 1001764-00).                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  | cmn:NumberEncoding     | 1...1<br>0/*   | String | <p><b>Required.</b> Encoding format for the type of serial numbers that are being requested from the enumeration list. Number encoding is tied to one of the three choice elements below. A specific number encoding is tied to a specific choice data element (e.g. AI(01)+AI(21)).</p> <p>The rule is:</p> <ul style="list-style-type: none"> <li>If NumberEncoding = AI(01)+AI(21), SGTIN-96, or SGTIN-198</li> <li>Either ObjectIdentifier/GTIN-14 or ObjectIdentifier/NTINObjectKey must be populated.</li> </ul> |

| Data Element |  |  |                            |              | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|----------------------------|--------------|----------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                            |              |                |        | <ul style="list-style-type: none"> <li>If NumberEncoding = AI(00) or SSCC-96               <ul style="list-style-type: none"> <li>ObjectIdentifier/CompanyPrefixObjectKey must be populated.</li> </ul> </li> <li>If NumberEncoding = CN-EDMC               <ul style="list-style-type: none"> <li>ObjectIdentifier/CN-SubTypeObjectKey must be populated.</li> </ul> </li> <li>All other encodings (AI(8003), GRAI-96, GRAI-170)               <ul style="list-style-type: none"> <li>Either GTIN-14 or CompanyPrefixObjectKey must be populated.</li> </ul> </li> </ul> <p>See the <a href="#">Encoding</a> enumeration list for valid values.</p> |
|              |  |  | cmn:ObjectIdentifier       |              | 1...1<br>-     | Choice | <p><b>Conditionally required</b> to populate with one of the three choice options. The identifier associated with the NumberEncoding for the serial numbers being requested. Only one of the three element options below can be populated:</p> <ul style="list-style-type: none"> <li><a href="#">CompanyPrefixObjectKey</a></li> <li><a href="#">CN-SubtypeObjectKey</a></li> <li><a href="#">GTIN14</a></li> </ul>                                                                                                                                                                                                                                 |
|              |  |  | cmn:CompanyPrefixObjectKey |              | 0...1<br>1/*   | String | <p><b>Conditionally required</b> if NumberEncoding is for SSCC numbers. The company prefix assigned by GS1 for the required SSCC numbers (e.g. 0388882).</p> <p>Values:</p> <ul style="list-style-type: none"> <li><a href="#">AI(01)+AI(21)</a></li> <li><a href="#">GRAI-96</a></li> <li><a href="#">GRAI-170 OR AI(8003)</a></li> <li><a href="#">SGTIN-96</a></li> <li><a href="#">SGTIN-198</a></li> </ul>                                                                                                                                                                                                                                      |
|              |  |  |                            | @filterValue | 1...1<br>-     | String | <p><b>Required.</b> The Filter Value for the packaging level of the SSCC number that is being requested to indicate if the SSCC is for a pallet, mixed case, etc. See the <a href="#">FilterValue</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | cmn:GTIN-14                |              | 0...1<br>14/14 | String | The GTIN-14 for the required SGTIN and AI(01)+AI(21) serial numbers. The GTIN-14 also informs the logistical unit. Used only when NumberEncoding is for SGTIN and AI(01)+AI(21) (e.g. 0888882020006).                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | cmn:NTINObjectKey          |              | 1...1<br>0/*   | String | <b>Conditionally required</b> if NumberEncoding is for SGTIN and AI(01)+AI(21). The NTIN for the required SGTIN and AI(01)+AI(21) serial numbers (e.g. 70244882930006).                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Data Element |  |              | Occurs Length | Type    | Description                                                          |
|--------------|--|--------------|---------------|---------|----------------------------------------------------------------------|
|              |  | cmn:Quantity | 1..1<br>1/*   | Integer | <b>Required.</b> Quantity of serial numbers requested (e.g. 100000). |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<snx:SNXRequestMessage xmlns:snx="urn:tracelink:mapper:sl:serial_number_exchange"
  xmlns:cmn="urn:tracelink:mapper:sl:commontypes"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <snx:ControlFileHeader>
    <cmn:FileSenderNumber>7777776067344</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888884043588</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>0000000001</cmn:FileControlNumber>
    <cmn:FileDate>2012-06-30</cmn:FileDate>
    <cmn:FileTime>06:30:32Z</cmn:FileTime>
  </snx:ControlFileHeader>
  <snx:MessageBody>
    <cmn:RequestId>20120630083253</cmn:RequestId>
    <cmn:PlantLocationId>8888882.02867.0</cmn:PlantLocationId>
    <cmn:ReferenceDocuments>
      <cmn:PONumber>1001764</cmn:PONumber>
      <cmn:POLine>001</cmn:POLine>
      <cmn:WorkOrderNumber>1001764-00</cmn:WorkOrderNumber>
    </cmn:ReferenceDocuments>
    <cmn:NumberEncoding>AI (01) +AI (21) </cmn:NumberEncoding>
    <cmn:ObjectIdentifier>
      <cmn:GTIN-14>80388882930006</cmn:GTIN-14>
    </cmn:ObjectIdentifier>
    <cmn:Quantity>10</cmn:Quantity>
  </snx:MessageBody>
</snx:SNXRequestMessage>
```



## Errors

| Data Element                                                                                                                                                      | Error Message                                                                                                           | Description                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Class 1                                                                                                                                                           |                                                                                                                         |                                                                                                                                                |
| cmn:PlantLocationId                                                                                                                                               | PlantLocationId is required !!!                                                                                         | The error occurs if the source is empty or null.                                                                                               |
| cmn:PONumber                                                                                                                                                      | PONumber is required !!!                                                                                                | The error occurs if the source is empty or null.                                                                                               |
| cmn:POLine                                                                                                                                                        | POLine is required !!!                                                                                                  | The error occurs if the source is empty or null.                                                                                               |
| cmn:NumberEncoding                                                                                                                                                | Field NumberEncoding must be populated !!!                                                                              | The error occurs if the source is empty or null.                                                                                               |
| cmn:ObjectIdentifier                                                                                                                                              | Only one choice element may be populated: CompanyPrefixObjectKey or GTIN-14, CNSubtypeObjectKey, NTINObjectKey !!!      | The error occurs if the source is empty or null.                                                                                               |
|                                                                                                                                                                   | Source GTIN-14 or NTINObjectKey must be populated if source NumberEncoding = AI(01)+AI(21) OR SGTIN-96 OR SGTIN-198 !!! | The error occurs if NumberEncoding = AI(01)+AI(21), SGTIN-96, or SGTIN-198, and both GTIN-14 and NTINObjectKey are empty or null.              |
|                                                                                                                                                                   | Source CompanyPrefixObjectKey must be populated if source NumberEncoding = AI(00) OR SSCC-96 !!!                        | The error occurs if NumberEncoding = AI(00) or SSCC-96, and CompanyPrefixObjectKey is empty or null.                                           |
|                                                                                                                                                                   | Source China encoded number type must be present if source NumberEncoding = CN-EDMC !!!                                 | The error occurs if NumberEncoding = CN-EDMC, and CN-SubType is empty or null.                                                                 |
|                                                                                                                                                                   | Either source CompanyPrefixObjectKey or GTIN-14 may be populated !!!                                                    | The error occurs if both, or neither, of ObjectIdentifier   <b>GTIN-14</b> and ObjectIdentifier   <b>CompanyPrefixObjectKey</b> are populated. |
| @filterValue                                                                                                                                                      | Source Attribute filterValue must be populated !!!                                                                      | The error occurs if the source is empty or null.                                                                                               |
| @codeLevel                                                                                                                                                        | Source Attribute codeLevel must be populated !!!                                                                        | The error occurs if the source is empty or null.                                                                                               |
| cmn:Quantity                                                                                                                                                      | Field Quantity must be populated !!!                                                                                    | The error occurs if the source is empty or null.                                                                                               |
| Class 2                                                                                                                                                           |                                                                                                                         |                                                                                                                                                |
| -                                                                                                                                                                 | -                                                                                                                       | -                                                                                                                                              |
| Class 3                                                                                                                                                           |                                                                                                                         |                                                                                                                                                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                         |                                                                                                                                                |

## Serial Number Exchange Response

## Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SNX\_RESPONSE

**Info Exchange Display Name:** Serial Number Response

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element           |                       |                        | Occurs Length  | Type   | Description                                                    |
|------------------------|-----------------------|------------------------|----------------|--------|----------------------------------------------------------------|
| snx:SNXResponseMessage |                       |                        | 1...1<br>-     | -      | <b>Required.</b> Root element of message.                      |
|                        | snx:ControlFileHeader |                        | 1...1<br>-     | -      | <b>Required.</b> XML file control header record.               |
|                        |                       | cmn:FileSenderNumber   | 1...1<br>1/10  | String | <b>Required.</b> File sender's company identifier.             |
|                        |                       | cmn:FileReceiverNumber | 1...1<br>1/10  | String | <b>Required.</b> File recipient's company identifier.          |
|                        |                       | cmn:FileControlNumber  | 1...1<br>1/*   | String | <b>Required.</b> Unique file control ID number.                |
|                        |                       | cmn:FileDate           | 1...1<br>10/10 | Date   | <b>Required.</b> Date file generated in XML YYYY-MM-DD format. |
|                        |                       | cmn:FileTime           | 1...1<br>8/8   | Time   | <b>Required.</b> Time file generated in XML HH:MM:SSZ format.  |
|                        | snx:MessageBody       |                        | 1...1          | -      | <b>Required.</b> XML file control header record.               |

| Data Element |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|-------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                         | -             |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  | cmn:RequestId           | 1...1<br>1/20 | String | <b>Required.</b> Unique identifier for the serial number request. This is used to link the serial number response from SNM back to the originating serial number request (e.g. 20120630083253).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  | cmn:ReferenceDocuments  | 0...1<br>-    | -      | References specific manufacturing orders associated with the serial number request. Indicates if the requested serial numbers will be used for the referenced manufacturing orders.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  | cmn:PONumber            | 1...1<br>0/*  | String | <b>Required.</b> Purchase Order (PO) number associated with serial number request (e.g. 1001764).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  | cmn:POLine              | 1...1<br>0/*  | String | <b>Required.</b> PO line number associated with serial number request (e.g. 001).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  | cmn:WorkOrderNumber     | 0...1<br>0/*  | String | Work Order number associated with serial number request (e.g. 1001764-00).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  | cmn:ReferenceIdentifier | 0...1<br>0/*  | String | Other referenced document identifier number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  | cmn:NumberEncoding      | 1...1<br>0/*  | String | <p><b>Required.</b> Encoding format for the type of serial numbers that were requested from the enumeration list. Number encoding is tied to one of the three choice elements below. A specific number encoding is tied to a specific choice data element. The rule is:(e.g. AI(01)+AI(21)).</p> <ul style="list-style-type: none"> <li>If NumberEncoding = AI(01)+AI(21), SGTIN-96, or SGTIN-198 <ul style="list-style-type: none"> <li>Either ObjectIdentifier/GTIN-14 or ObjectIdentifier/NTINObjectKey must be populated.</li> </ul> </li> <li>If NumberEncoding = AI(00) or SSCC-96 <ul style="list-style-type: none"> <li>ObjectIdentifier/CompanyPrefixObjectKey must be populated</li> </ul> </li> <li>If NumberEncoding = CN-EDMC <ul style="list-style-type: none"> <li>ObjectIdentifier/CN-SubTypeObjectKey must be populated.</li> </ul> </li> <li>All other encodings (AI(8003), GRAI-96, or GRAI-170) <ul style="list-style-type: none"> <li>Either GTIN-14 or CompanyPrefixObjectKey must be populated.</li> </ul> </li> </ul> <p>See the <a href="#">Encoding</a> enumeration list for valid values.</p> |
|              |  | cmn:ObjectIdentifier    | 1...1<br>-    | Choice | <p><b>Required.</b> The identifier associated with the NumberEncoding for the serial numbers that were requested. This is a choice element. Only one of the four element options below may be populated:</p> <ul style="list-style-type: none"> <li>CompanyPrefixObjectKey</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Data Element |  |  |                            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|----------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                            |               |         | <ul style="list-style-type: none"> <li>GTIN-14</li> <li>NTINObjectKey</li> </ul> <p> If all or none of the option fields are populated, an error is returned. See the rule in the cell above concerning number encoding options and population fields within this choice element.</p>   |
|              |  |  | cmn:CompanyPrefixObjectKey | 0...1<br>0/*  | String  | <p>The company prefix assigned by GS1 for the required SSCC numbers. Used only if NumberEncoding was for SSCC numbers (e.g. 0388882). Values:</p> <ul style="list-style-type: none"> <li>AI(00)</li> <li>SSCC</li> </ul>                                                                                                                                                   |
|              |  |  | @filterValue               | 1...1<br>0/*  | String  | <p><b>Required.</b> The Filter Value for the packaging level of the SSCC number that was requested to indicate if the SSCC is for a pallet, mixed case, etc. This should be an integer with a value from 0 to 7 (e.g. 0). See the <a href="#">FilterValue</a> enumeration list for valid values.</p>                                                                       |
|              |  |  | cmn:GTIN-14                | 0...1<br>1/14 | String  | <p><b>Conditionally required</b> if CompanyPrefixObjectKey or NTINObjectKey are not populated. The GTIN-14 for the required SGTIN. The GTIN-14 also informs the logistical unit. Values:(e.g. 80388882930006).</p> <ul style="list-style-type: none"> <li>AI(00)</li> <li>AI(8003)</li> <li>GRAI-96</li> <li>GRAI-170</li> <li>SSCC-96</li> </ul>                          |
|              |  |  | cmn:NTINObjectKey          | 0...1<br>0/*  | String  | <p><b>Conditionally required</b> if NumberEncoding was for SGTIN and AI(01)+AI(21). The NTIN for the required SGTIN and AI(01)+AI(21) serial numbers (e.g. 70244882930006).</p>                                                                                                                                                                                            |
|              |  |  | cmn:Quantity               | 1...1<br>1/*  | Integer | <p><b>Required.</b> Quantity of serial numbers requested (e.g. 100000).</p>                                                                                                                                                                                                                                                                                                |
|              |  |  | @choice                    | 1...1<br>-    | Choice  | <p><b>Required.</b> Choice group with the response to a serial number request. Returns either a serial number range, serial number list, or an error message if the request was denied. Only one of the following three elements can be populated:</p> <ul style="list-style-type: none"> <li>ErrorMessage</li> <li>SerialNumberList</li> <li>SerialNumberRange</li> </ul> |

| Data Element |  |                       |                    |             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|-----------------------|--------------------|-------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:SerialNumberRange |                    |             | 0...1<br>-    | -       | Serial number range if a range of serial numbers is returned in the response.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |                       | cmn:StartingNumber |             | 1...1<br>1/*  | String  | <p><b>Required.</b> Serial number range starting value (e.g. 018038888293000621100570239041). This element returns serial numbers in their fully formed format:</p> <ul style="list-style-type: none"> <li>AI (01) (21) formatted numbers for SGTINs are populated in the fields fully formed as "018038888293000621100000000001" with the "01" and "21" values present.</li> <li>AI (00) formatted numbers for SSCCs are populated in the fields fully formed as "00003888820001000011" with the "00" value present.</li> </ul>                                                                                                                                                                   |
|              |  |                       | cmn:EndingNumber   |             | 1...1<br>1/*  | String  | <p><b>Required.</b> Serial number range ending value (e.g. 018038888293000621100570239049). This element returns serial numbers in their fully formed format:</p> <ul style="list-style-type: none"> <li>AI (01) (21) formatted numbers for SGTINs are populated in the fields fully formed as "018038888293000621100000000001" with the "01" and "21" values present.</li> <li>AI (00) formatted numbers for SSCCs are populated in the fields fully formed as "00003888820001000011" with the "00" value present.</li> </ul>                                                                                                                                                                     |
|              |  | cmn:SerialNumberList  |                    |             | 0...1<br>-    | -       | Serial number list response returned from the serial number manager.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |                       | @isRandom          |             | 0...1<br>-    | Boolean | Specifies if returned serial numbers are sequential or random. Optional attribute of the SerialNumber element. If set to true, the list of serial numbers is random and is a sequentially numbered list (e.g. true).                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |                       | cmn:SerialNumber   |             | 1...*<br>1/*  | String  | <p><b>Required.</b> Serial number in a list of serial numbers (e.g. 018038888293000621100570239041). This element returns serial numbers in their fully formed format:</p> <ul style="list-style-type: none"> <li>AI (01) (21) formatted numbers for SGTINs are populated in the fields fully formed as "018038888293000621100000000001" with the "01" and "21" values present.</li> <li>AI (00) formatted numbers for SSCCs are populated in the fields fully formed as "00003888820001000011" with the "00" value present.</li> </ul> <div>  SGTINs are mandatory for Russia serial numbers.         </div> |
|              |  |                       |                    | @cryptoKey  | 0...1<br>0/4  | String  | <b>Conditionally required</b> for Russia serial numbers. The crypto key value retrieved from the CRPT Order Management Station. This is an alphanumeric value. AI (91) denotes this value in the serial number (e.g. 911234).                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |                       |                    | @cryptoCode | 0...1         | String  | <b>Conditionally required</b> for Russia serial numbers. The crypto code value retrieved from the CRPT Order Management Station. This value can contain alphanumeric values as well as symbols. AI (92) denotes this value in the serial                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Data Element |  |  |  |                  | Occurs Length | Type | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|------------------|---------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                  | 0/44          |      | <p>number. The following are valid symbols:(e.g. 92AusibQLCfH2fbOoXL3yU77gRBOsnhdkljRGjZvl7gy0U).</p> <ul style="list-style-type: none"> <li>• !</li> <li>• &amp;quot; – (")</li> <li>• %</li> <li>• &amp;amp; – (&amp;)</li> <li>• &amp;apos; – (')</li> <li>• *</li> <li>• +</li> <li>• -</li> <li>• .</li> <li>• /</li> <li>• _</li> <li>• ,</li> <li>• :</li> <li>• ;</li> <li>• =</li> <li>• &amp;lt; – (&lt;)</li> <li>• &amp;gt; – (&gt;)</li> <li>• ?</li> </ul> <div>  TraceLink escapes the following special XML characters before sending the Serial Number Exchange Response message:           <ul style="list-style-type: none"> <li>• &amp;quot; – (")</li> <li>• &amp;amp; – (&amp;)</li> <li>• &amp;apos; – (')</li> <li>• &amp;lt; – (&lt;)</li> <li>• &amp;gt; – (&gt;)</li> </ul> </div> |
|              |  |  |  | cmn:ErrorMessage | 0...1         | -    | Error response information returned by SNM when the serial number request is denied.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



| Data Element |  |  |                      | Occurs Length | Type   | Description                                                                                                                                |
|--------------|--|--|----------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                      | -             |        |                                                                                                                                            |
|              |  |  | cmn:ErrorCode        | 0...1<br>-    | String | Error code returned by the SNM when the serial number request is denied (e.g. 100).                                                        |
|              |  |  | cmn:ErrorDescription | 1...1<br>-    | String | <b>Required.</b> Error description returned by the SNM when the serial number request is denied (e.g. Invalid GTIN specified in request.). |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<snx:SNXResponseMessage xmlns:snx="urn:tracelink:mapper:sl:serial_number_exchange"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <snx:ControlFileHeader>
    <cmn:FileSenderNumber>8888884043588</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>7777776067344</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>D000000032</cmn:FileControlNumber>
    <cmn:FileDate>2012-06-30</cmn:FileDate>
    <cmn:FileTime>06:32:32Z</cmn:FileTime>
  </snx:ControlFileHeader>
  <snx:MessageBody>
    <cmn:RequestId>20120630083253</cmn:RequestId>
    <cmn:ReferenceDocuments>
      <cmn:PONumber>1001764</cmn:PONumber>
      <cmn:POLine>001</cmn:POLine>
      <cmn:WorkOrderNumber>1001764-00</cmn:WorkOrderNumber>
    </cmn:ReferenceDocuments>
    <cmn:NumberEncoding>SGTIN-96</cmn:NumberEncoding>
    <cmn:ObjectIdentifier>
      <cmn:NTINObjectKey>80388882930006</cmn:NTINObjectKey>
    </cmn:ObjectIdentifier>
    <cmn:Quantity>10</cmn:Quantity>
    <cmn:SerialNumberList>
      <cmn:SerialNumber cryptoKey="911234"
cryptoCode="92Ausib&apos;LCfH2fbOoXL3yU77gRBOsnhdkl&lt;RGjZvl7g&gt;0&amp;">018038888293000621100570239041</cmn:Ser
ialNumber>
    </cmn:SerialNumberList>
  </snx:MessageBody>
</snx:SNXResponseMessage>
```

```
</snx:MessageBody>
</snx:SNXResponseMessage>
```

## Errors

| Data Element                                                                                                                                                      | Error Message                                                                                                           | Description                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                                                                                                                                                    |                                                                                                                         |                                                                                                                                                |
| cmn:PONumber                                                                                                                                                      | PONumber is required !!!                                                                                                | The error occurs if the source is empty or null.                                                                                               |
| cmn:POLine                                                                                                                                                        | POLine is required !!!                                                                                                  | The error occurs if the source is empty or null.                                                                                               |
| cmn:NumberEncoding                                                                                                                                                | Field NumberEncoding must be populated !!!                                                                              | The error occurs if the source is empty or null.                                                                                               |
| cmn:ObjectIdentifier                                                                                                                                              | Only one choice element may be populated: CompanyPrefixObjectKey or GTIN-14, CNSubtypeObjectKey, NTINObjectKey !!!      | The error occurs if more than one element is populated.                                                                                        |
|                                                                                                                                                                   | Source GTIN-14 or NTINObjectKey must be populated if source NumberEncoding = AI(01)+AI(21) OR SGTIN-96 OR SGTIN-198 !!! | The error occurs if NumberEncoding = AI(01)+AI(21), SGTIN-96, or SGTIN-198, and both GTIN-14 and NTINObjectKey are empty or null.              |
|                                                                                                                                                                   | Source CompanyPrefixObjectKey must be populated if source NumberEncoding = AI(00) OR SSCC-96 !!!                        | The error occurs if NumberEncoding = AI(00) or SSCC-96, and CompanyPrefixObjectKey is empty or null.                                           |
|                                                                                                                                                                   | Source China encoded number type must be present if source NumberEncoding = CN-EDMC !!!                                 | The error occurs if NumberEncoding = CN-EDMC, and CN-SubType is empty or null.                                                                 |
|                                                                                                                                                                   | Either source CompanyPrefixObjectKey or GTIN-14 may be populated !!!                                                    | The error occurs if both, or neither, of ObjectIdentifier   <b>GTIN-14</b> and ObjectIdentifier   <b>CompanyPrefixObjectKey</b> are populated. |
| cmn:CompanyPrefixObjectKey   @filterValue                                                                                                                         | Source Attribute filterValue must be populated !!!                                                                      | The error occurs if the source is empty or null.                                                                                               |
| @codeLevel                                                                                                                                                        | Source Attribute codeLevel must be populated !!!                                                                        | The error occurs if the source is empty or null.                                                                                               |
| cmn:Quantity                                                                                                                                                      | Quantity must be populated !!!                                                                                          | The error occurs if the source is empty or null.                                                                                               |
| @choice                                                                                                                                                           | Only one choice element may be populated: SerialNumberRange or SerialNumberList or ErrorMessage !!!                     | The error occurs if more than one element is populated.                                                                                        |
| <b>Class 2</b>                                                                                                                                                    |                                                                                                                         |                                                                                                                                                |
| -                                                                                                                                                                 | -                                                                                                                       | -                                                                                                                                              |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                         |                                                                                                                                                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                         |                                                                                                                                                |

# Serial Number Exchange Request & Response (SAP ATTP)

## Serial Number Exchange Request

### Guidelines

**Message Type:** SNX\_REQUEST

**Info Exchange Display Name:** Serial Number Request

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element        |               |           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------|---------------|-----------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| n1:SNR_REQ_ASYNC_IN |               |           | 1...1<br>-    | -      | <b>Required.</b> Root data element.                                                                                                                                                                                                                                                                                                                                                     |
|                     | IB_ONLY_EXACT |           | 0...1<br>0/1  | String | Some consumer services cannot handle partial responded serial number requests (internal SAP ATTP buffer does have enough numbers. The request can only be responded partial). This parameter controls whether partial responses are allowed.<br>"X": The parameter is set to true. Full quantity of the numbers or nothing.<br>"": The parameter is blank. Partial quantity is allowed. |
|                     | IS_SSCC       |           | 0...1<br>-    | -      | Conditionally required for SSCC requests. SSCC Information.                                                                                                                                                                                                                                                                                                                             |
|                     |               | GCP       | 1...1<br>0/12 | String | <b>Required.</b> The Global company prefix that is assigned to the business partner in the system (e.g. 4298382). This Request Id is required by TraceLink. TraceLink uses this value in the Serial Number Response message to link the request and the response.                                                                                                                       |
|                     |               | EXT_DIGIT | 1...1<br>0/1  | String | <b>Required.</b> In SAP ATTP, the SSCC Extension Digit is the first digit of the serial number (e.g. 2).                                                                                                                                                                                                                                                                                |
|                     | IS_TRADE_ITEM |           | 0...1<br>-    | -      | <b>Conditionally required</b> for GTIN requests. SGTIN Information.                                                                                                                                                                                                                                                                                                                     |

| Data Element |                   | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|-------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | TRADE_ITEM_TYPE   | 1...1<br>0/10 | String  | <b>Required.</b> This parameter defines trade item type.<br>Value = <b>GTIN</b> (e.g. GTIN).                                                                                                                                                                                                                                                                                           |
|              | TRADE_ITEM_ID     | 1...1<br>0/40 | String  | <b>Required.</b> Depends on TRADE_ITEM_TYPE value (e.g. 14298382900015).<br>The GTIN-14 for the required SGTIN and AI(01)+AI(21) serial numbers. The GTIN-14 also informs the logistical unit. Use only when NumberEncoding is for SGTIN and AI(01)+AI(21).                                                                                                                            |
|              | IV_LIST_RANGE     | 1...1<br>0/1  | String  | <b>Required.</b> Defines the type of the serial number response. Values: (e.g. L) <ul style="list-style-type: none"> <li><b>R</b> – The response contains a range.</li> <li><b>L</b> – The response contains a list. (Default)</li> </ul>                                                                                                                                              |
|              | IV_READILY_ENCODE | 1...1<br>0/1  | String  | <b>Required.</b> In addition to the numbers or range, the request also optionally provides readily encoded data in either a GS1 element string or in EPC URI:<br>1: Encoding in GS1 Element format. <div> <i>i</i> The Serial Number Exchange Response (SAP ATTP) message includes Russia crypto codes if enabled in the serial number template. </div> 2: Encoding in EPC URI format. |
|              | IV_SIZE           | 1...1<br>1/*  | Integer | <b>Required.</b> Quantity of serial numbers within range request (e.g. 1000).                                                                                                                                                                                                                                                                                                          |
|              | IV_SYSTEM         | 1...1<br>0/60 | String  | <b>Required.</b> The system name that has been created for the caller in SAP Advanced Track and Trace for Pharmaceuticals (e.g. 5060173540005 TRACELINK). <div> <i>i</i> TraceLink uses this field to store the Sender and Receiver information separated by a pipe ( ) character. </div>                                                                                              |

## Example

TraceLink does not provide examples for third-party message format. Please contact SAP for message examples pertaining to this message.

## Errors

| Data Element                                                                                                                                                      | Error Message                                                     | Description                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Class 1                                                                                                                                                           |                                                                   |                                                                                     |
| GCP                                                                                                                                                               | Either GCP or TRADE_ITEM_TYPE must be populated, but not both !!! | The error occurs if both GCP and TRADE_ITEM_TYPE are populated.                     |
| TRADE_ITEM_TYPE                                                                                                                                                   | Either GCP or TRADE_ITEM_TYPE must be populated, but not both !!! | The error occurs if both GCP and TRADE_ITEM_TYPE are populated.                     |
| TRADE_ITEM_ID                                                                                                                                                     | TRADE_ITEM_ID is required if TRADE_ITEM_TYPE GTIN is present !!!  | The error occurs if TRADE_ITEM_TYPE equals "GTIN", but the source is empty or null. |
| Class 2                                                                                                                                                           |                                                                   |                                                                                     |
| GCP                                                                                                                                                               | GCP occurs fewer times than its minimum number of occurrences !!! | The error occurs if both GCP or TRADE_ITEM_TYPE are empty or null.                  |
| Class 3                                                                                                                                                           |                                                                   |                                                                                     |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                   |                                                                                     |

## Serial Number Exchange Response

### Guidelines

**Message Type:** SNX\_RESPONSE

**Info Exchange Display Name:** Serial Number Response

 When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element         | Occurs Length | Type | Description                         |
|----------------------|---------------|------|-------------------------------------|
| n1:SNR_REQ_ASYNC_OUT | 1...1<br>-    | -    | <b>Required.</b> Root data element. |

| Data Element  |                 | Occurs<br>Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------|-----------------|------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IB_ONLY_EXACT |                 | 0...1<br>0/1     | String | Some consumer services cannot handle partial responded serial number requests (internal SAP ATTP buffer does have enough numbers. The request can only be responded partial). This parameter controls whether partial responses are allowed. Values:<br><b>X</b> – The parameter is set to true. Full quantity of the numbers or nothing.<br>" " – The parameter is blank. Partial quantity is allowed. |
| IS_RANGE      |                 | 1...1<br>-       | -      | Contains serial number ranges for a range request. In case of a list request, it will be empty.                                                                                                                                                                                                                                                                                                         |
|               | NUMBER_FROM     | 1...1<br>0/40    | String | <b>Required.</b> Lower limit of the range (e.g. 012030001123498721123456789012).                                                                                                                                                                                                                                                                                                                        |
|               | NUMBER_TO       | 1...1<br>0/40    | String | <b>Required.</b> Upper limit of the range (e.g. 012030001123498721333456799012).                                                                                                                                                                                                                                                                                                                        |
|               | TIME_REQ        | 1...1<br>0/40    | Date   | <b>Required.</b> Timestamp of the range request (e.g. 20110815063032).                                                                                                                                                                                                                                                                                                                                  |
| IS_SSCC       |                 | 0...1<br>-       | -      | <b>Conditionally required</b> for SSCC requests. SSCC Information.                                                                                                                                                                                                                                                                                                                                      |
|               | GCP             | 1...1<br>0/12    | String | <b>Required.</b> The Global company prefix that is assigned to the business partner in the system. Returns request parameters (e.g. 030001).                                                                                                                                                                                                                                                            |
|               | EXT_DIGIT       | 1...1<br>0/1     | String | In SAP ATTP, the SSCC Extension Digit is the first digit of the serial number (e.g. 2).                                                                                                                                                                                                                                                                                                                 |
| IS_TRADE_ITEM |                 | 0...1<br>-       | -      | <b>Conditionally required</b> for GTIN requests. SGTIN Information.                                                                                                                                                                                                                                                                                                                                     |
|               | TRADE_ITEM_TYPE | 1...1<br>0/10    | String | <b>Required.</b> This parameter defines trade item type (e.g. GTIN). Value = <b>GTIN</b> .                                                                                                                                                                                                                                                                                                              |
|               | TRADE_ITEM_ID   | 1...1<br>0/40    | String | <b>Required.</b> Filled with a GTIN (e.g. 20300011234987).                                                                                                                                                                                                                                                                                                                                              |
| IT_SERIALS    |                 | 1...1<br>-       | -      | Contains list of serial numbers in case of list request. It is empty in case of range request.                                                                                                                                                                                                                                                                                                          |
|               | item            | 0...*            | -      | <b>Required.</b>                                                                                                                                                                                                                                                                                                                                                                                        |



| Data Element |  |                   |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|-------------------|----------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                   |          | -             |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |                   | NUMBER   | 1...1<br>0/40 | String  | <b>Required.</b> Contains list of serial numbers (e.g. 012030001123498721123456789012).                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  | IT_ENCODED        |          | 0...1<br>-    | -       | <b>Conditionally required</b> for Russia serial numbers. Contains list of serial numbers with crypto keys and crypto codes retrieved from the CRPT Order Management Station.                                                                                                                                                                                                                                                                                                                               |
|              |  | item              |          | 0...*<br>-    | -       | <b>Required.</b> Group of serial numbers with their corresponding crypto key and crypto code.                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |                   | OBJ_CODE | 1...1<br>0/*  | String  | <b>Required.</b> Contains encoded serial number including corresponding crypto key and crypto code. Must include both the crypto key and crypto code values. Format is AI(01)+(21)+(91)+(92), where (91) denotes the crypto key and (92) denotes the crypto code (e.g. (01)20300011234987(21)123456789012(91)1129(92)AusibQLCfH2fbOoXL3yU77gRBOsnhdKljRGjZvl7gy0Uu9E1l0x6S2RzaWbKSgl1RmYQnZyumM6ZWhx3ktKOCw==). Crypto key value is alphanumeric. Crypto code can contain alphanumeric values and symbols. |
|              |  | IV_ACTION         |          | 1...1<br>0/1  | String  | Return parameter which indicates the level of completeness of the request. TraceLink sends a reject error code if request is rejected:(e.g. R).<br><b>R</b> – Request has been rejected.                                                                                                                                                                                                                                                                                                                   |
|              |  | IV_LIST_RANGE     |          | 1...1<br>0/1  | String  | Defines the type of the serial number response. This can be a list or a range. Values:(e.g. L).<br><ul style="list-style-type: none"> <li><b>R</b> – The response contains a range.</li> <li><b>L</b> – The response contains a list.</li> </ul>                                                                                                                                                                                                                                                           |
|              |  | IV_READYLY_ENCODE |          | 1...1<br>0/1  | String  | In addition to the numbers or range the request optionally also provides back readily encoded data either in GS1 element string or in EPC URI:<br>1: Encoding in GS1 Element format.<br>2: Encoding in EPC URI format.<br>TraceLink will not populate this element, so an empty tag will be sent.                                                                                                                                                                                                          |
|              |  | IV_SIZE           |          | 1...1<br>1/*  | Integer | <b>Required.</b> Quantity of serial numbers within range request (e.g. 1000).                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  | IV_SYSTEM         |          | 1...1<br>0/60 | String  | <b>Required.</b> The system name that has been created for the caller in SAP Advanced Track and Trace for Pharmaceuticals (e.g. 5060173540005 TRACELINK).<br>TraceLink uses this field to store the Sender and Receiver information separated by a pipe ( ) character.                                                                                                                                                                                                                                     |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<n1:SNR_REQ_ASYNC_OUT xmlns:n1="urn:sap-com:document:sap:rfc:functions">
```

```

<IS_RANGE>
  <NUMBER_FROM/>
  <NUMBER_TO/>
  <TIME_REQ>20120630063234</TIME_REQ>
</IS_RANGE>
<IS_TRADE_ITEM>
  <TRADE_ITEM_TYPE>GTIN</TRADE_ITEM_TYPE>
  <TRADE_ITEM_ID>20300011234987</TRADE_ITEM_ID>
</IS_TRADE_ITEM>
<IT_ENCODED>
  <item>
    <OBJ_CODE>(01)00882025030220(21)100000001020(91)2332
(92)AusibQLCfH2fbOoXL3yU77gRBOsnhdkljRGjZvl7gy0Uu9E1l0x6S2RzaWbKSgI1RmYQnZyumM6ZWhx3kt</OBJ_CODE>
  </item>
  <item>
    <OBJ_CODE>(01)00882025030220(21)100000001021(91)2332
(92)AusibQLCfH2fbOoXL3yU77gRBOsnhdkljRGjZvl7gy0Uu9E1l0x6S2RzaWbKSgI1RmYQnZyumM6ZWhx3kt</OBJ_CODE>
  </item>
</IT_ENCODED>
<IT_RETURN/>
<IT_SERIALS>
  <item>
    <NUMBER>(01)00882025030220(21)100000001020</NUMBER>
  </item>
  <item>
    <NUMBER>(01)00882025030220(21)100000001021</NUMBER>
  </item>
</IT_SERIALS>
<IV_ACTION/>
<IV_LIST_RANGE>L</IV_LIST_RANGE>
<IV_READYLY_ENCODE/>
<IV_SIZE>10</IV_SIZE>
<IV_SYSTEM>8888884043588|7777776067344</IV_SYSTEM>
</n1:SNR_REQ_ASYNC_OUT>

```

## Errors

| Data Element                                                                                                                                                      | Error Message                                                                                          | Description                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Class 1                                                                                                                                                           |                                                                                                        |                                                                                                                 |
| NUMBER_FROM                                                                                                                                                       | EndingNumber is required when StartingNumber is populated !!!                                          | The error occurs if cmn:StartingNumber is present in the source and cmn:EndingNumber is missing.                |
| NUMBER_TO                                                                                                                                                         | StartingNumber is required when EndingNumber is populated !!!                                          | The error occurs if cmn:EndingNumber is present in the source and cmnStartingNumber is missing.                 |
| GCP                                                                                                                                                               | At least one of CompanyPrefixObjectKey or GTIN14ObjectKey must be present in source !!!                | The error occurs if neither cmn:CompanyPrefixObjectKey and cmn:GTIN14ObjectKey are present in the source.       |
|                                                                                                                                                                   | Only one of CompanyPrefixObjectKey or GTIN14ObjectKey should be present in source !!!                  | The error occurs if both cmn:CompanyPrefixObjectKey and cmn:GTIN14ObjectKey are present in the source.          |
| NUMBER                                                                                                                                                            | Only one choice element may be populated: SerialNumberRange or SerialNumberList or ErrorMessage !!!    | The error occurs if more than one of the following elements are populated: NUMBER, IV_ACTION, or IV_LIST_RANGE. |
|                                                                                                                                                                   | One of the choice elements SerialNumberRange or SerialNumberList or ErrorMessage must be populated !!! | The error occurs if more than one of the following elements are populated: NUMBER, IV_ACTION, or IV_LIST_RANGE. |
| OBJ_CODE                                                                                                                                                          | Both crypto key and crypto code are required to build an encoded serial number !!!                     | The error occurs if either the crypto key or crypto code is present in the source and the other value missing.  |
| IV_ACTION                                                                                                                                                         | Only one choice element may be populated: SerialNumberRange or SerialNumberList or ErrorMessage !!!    | The error occurs if more than one of the following elements are populated: NUMBER, IV_ACTION, or IV_LIST_RANGE. |
|                                                                                                                                                                   | One of the choice elements SerialNumberRange or SerialNumberList or ErrorMessage must be populated !!! | The error occurs if more than one of the following elements are populated: NUMBER, IV_ACTION, or IV_LIST_RANGE. |
| IV_LIST_RANGE                                                                                                                                                     | Only one choice element may be populated: SerialNumberRange or SerialNumberList or ErrorMessage !!!    | The error occurs if more than one of the following elements are populated: NUMBER, IV_ACTION, or IV_LIST_RANGE. |
|                                                                                                                                                                   | One of the choice elements SerialNumberRange or SerialNumberList or ErrorMessage must be populated !!! | The error occurs if more than one of the following elements are populated: NUMBER, IV_ACTION, or IV_LIST_RANGE. |
| Class 2                                                                                                                                                           |                                                                                                        |                                                                                                                 |
| -                                                                                                                                                                 |                                                                                                        |                                                                                                                 |
| Class 3                                                                                                                                                           |                                                                                                        |                                                                                                                 |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                        |                                                                                                                 |

# Serial Number Request & Response (SOAP)

## Serial Number Request

### Guidelines

| Data Element     |                |                          |                 | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                  |
|------------------|----------------|--------------------------|-----------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| soapenv:Envelope |                |                          |                 | 1...1<br>1/*  | -      | <b>Required.</b> Soap envelope.                                                                                                                                                                                                                                                              |
|                  | soapenv:Header |                          |                 | 0...1<br>-    | -      | Not used by TraceLink, therefore the element can be null or omitted.                                                                                                                                                                                                                         |
|                  | soapenv:Body   |                          |                 | 1...1<br>-    | -      | <b>Required.</b> Soap message body.                                                                                                                                                                                                                                                          |
|                  |                | urn:serialNumbersRequest |                 | 1...1<br>-    | -      | <b>Required.</b> The Serial Number Request message payload.                                                                                                                                                                                                                                  |
|                  |                |                          | SendingSystem   | 0...1<br>1/*  | String | <b>Required.</b> Identifier for site manager system requesting serial numbers. This value must match the configured value for the requesting system in the Serial Number Exchange configuration. This value is repeated in the response message as the ReceivingSystem (e.g. SYSTEM-100001). |
|                  |                |                          | ReceivingSystem | 0...1<br>1/*  | String | <b>Required.</b> Identifier for target service that responds to serial number requests. This value must match the configured value for the service in the Serial Number Manager configuration. This value is repeated in the response message as the SendingSystem (e.g. 0060354701201).     |
|                  |                |                          | IdType          | 0...<br>1/*   | String | Specifies the type of serial numbers requested (e.g. GS1_SER CN_SER).                                                                                                                                                                                                                        |
|                  |                |                          | EncodingType    | 0...1<br>1/*  | String | <b>Required.</b> Specifies the encoding format for the type of serial numbers requested. SGTIN is used for both GTIN-14 and NTIN numbers (e.g. SGTIN SSCC CN_EDMC). See the <a href="#">Encoding</a> enumeration list for valid values.                                                      |
|                  |                |                          | Size            | 0...1         | Int    | <b>Required.</b> Specifies the quantity of serial numbers requested (e.g. 100000).                                                                                                                                                                                                           |

| Data Element |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                          | -             |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | ObjectKey                | 0...1<br>-    | -      | <b>Required.</b> The key for the associated object (that holds the identifier type and value) for which the serial numbers are being requested.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | Name                     | 0...1<br>1/*  | String | <b>Required.</b> Specifies the identifier type of the associated object for which serial numbers are being requested (e.g. GTIN).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | Value                    | 0...1<br>1/*  | String | <p><b>Required.</b> The corresponding identifier of the associated object for which serial numbers are being requested (e.g. the GTIN-14 identifier, NTIN 14-digit identifier, GS1 Company Prefix value, or China Subtype and attributes). If ObjectKey/Name requests an SSCC code using COMPANY_PREFIX, the format of the Value is as follows:(e.g. GTIN: 00882026030229).</p> <ul style="list-style-type: none"> <li>&lt;Company Prefix&gt; &lt;Logistic Unit Indicator&gt;</li> </ul> <p>The Logistic Unit Indicator to request an SSCC for a pallet or case must match the configured value in Serial Number Manager. If ObjectKey/Name requests a CN_EDMC code using CN_SUBTYPE_LEVEL_RATIO, the format of the Value is as follows:</p> <ul style="list-style-type: none"> <li>&lt;CN-Subtype Code&gt; &lt;CN Code Level&gt; &lt;CN Package Ratio&gt;</li> </ul> <p>The Code Level must be the configured code level value for the packaging hierarchy as configured in China Master Data that maps to a specific Resource Code. The PackageRatio is optional. If included, it must use the PackageRatio exactly as configured in China Master Data that maps to a specific Resource Code. It is used to disambiguate when there are serial numbers associated with multiple Resource Codes for the Code Level or Package Ratio for the Subtype. If it is omitted and there are multiple Resource codes for the same Code Level or Package Ratio, the system returns an error.</p> |
|              |  |  | RequestRandomizedNumbers | 0...1<br>1/*  | String | Not used by TraceLink, the element can be null or omitted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | ReferenceDocuments       | 1...1<br>-    | -      | Indicates optional reference documents related to the request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | PONumber                 | 1...1<br>1/*  | String | The Purchase Order (PO) number associated with serial number request (e.g. 10043).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | POLine                   | 1...1<br>1/*  | String | <b>Conditionally required</b> if PONumber is populated. The PO line number associated with serial number request (e.g. 1).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | WorkOrderNumber          | 0...1         | String | The Work Order number associated with serial number request (e.g. 10043-001).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Data Element |  |  |             |             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|-------------|-------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |             |             | 1/*           |         |                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |             | Referenceld | 0..1<br>1/*   | String  | The Reference Identifier associated with serial number request (e.g. 917902db-1307-4182-ad3d-29eca2d699ae).                                                                                                                                                                                                                                                   |
|              |  |  | SyncRequest |             | 0..1<br>1/*   | Boolean | <p>If requesting more than 100,000 serial numbers, it is recommended to set SyncRequest to "false" to enable asynchronous processing to avoid an error.</p> <p>Values:</p> <ul style="list-style-type: none"> <li>• <code>true</code> - enables synchronous processing.</li> <li>• <code>false</code> - enables asynchronous processing. (Default)</li> </ul> |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:serialNumbersRequest>
      <SendingSystem>LineSys11</SendingSystem>
      <ReceivingSystem>0060354701201</ReceivingSystem>
      <IdType>GS1_SER</IdType>
      <EncodingType>SGTIN</EncodingType>
      <Size>10</Size>
      <ObjectKey>
        <Name>GTIN</Name>
        <Value>50882025010333</Value>
      </ObjectKey>
    </urn:serialNumbersRequest>
  </soapenv:Body>
</soapenv:Envelope>
```



## Errors

| Error Code | Error Messages                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 500        | CN-Subtype identifier <CN-Subtype> is not in the permitted serial number request list.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 500        | Encoding type requested is not correct type for product <ObjectKey/Name> <ObjectKey/Value> and service <SNX Service Identifier>.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 500        | Filter value <FilterValue> or Company Prefix <CompanyPrefix ObjectKey> is not valid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 500        | GTIN-14 identifier <GTIN-14> is not in the permitted serial number request list.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 500        | More than one Code Level found for <CN_SUBTYPE_LEVEL_RATIO>. PackagingRatio must be specified to disambiguate request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 500        | NTIN identifier <NTIN Value> is not in the permitted serial number request list.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 500        | Product ID <ObjectKey/Name> <ObjectKey/Value> is not valid for products in service <SNX ServiceID>.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 500        | THROUGHPUT_EXCEEDED:Throughput has been exceeded. Please retry your message again. If this error continues, consider reducing the size of your operation or contact TraceLink support.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 500        | Quantity requested for <Object Identifier> exceeds the maximum quantity allowed: <Maximum Quantity for Serial Number Requests>.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 500        | Quantity requested for <Object Identifier> exceeds the maximum quantity allowed: 500000.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 500        | Request for too few serial numbers: quantity <quantity requested> must be greater than 0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 500        | Serial Number Manager does not have serial numbers to satisfy the serial number request for <Object Identifier>. This template has serial numbers associated with a production order. The serial number request must include a PO Number, Work Order Number, or Reference Identifier to request numbers against the associated production order (e.g. This occurs when the template TraceLink attempts to look-up numbers against requires reference documents, however, the request did not include any.).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 500        | Serial Number Manager does not have serial numbers to satisfy the serial number request for <Object Identifier> with [PO Number <PONumber>] [and] [WorkOrder <WorkOrderNumber>] [and] [<Reference Identifier> <ReferencelIdentifierNumber>] (e.g. Error message should include only the combination of one or more identifiers that are provided in the request. Rejected if a serial number request is made against a template that is configured AutoReplenishment and SN Pools Tagged with Production Order Id and request does not contain a production order id (PONumber, WorkOrder and/or ReferencelIdentifier). If the Serial Number Exchange application that receives the SN Request is connected to a TraceLink Serial Number Manager application of the same application owner's, the system checks the Serial Number Manager Template for the ObjectIdentifier and if it is configured as AutoReplenishment, the system needs to check if the Pharmaceutical Manufacturer of the serial numbers is maintaining separate serial number pools for each production order and ensure that the serial numbers provisioned against a request are drawing from the correct production order pool.). |
| 500        | Unable to acquire lock on serial number space for <ObjectKey/Value>. Please try again.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 500        | Unable to find service from lookup id: <SNX ServiceID>.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 500        | When requesting China serial numbers and a non-numeric code level value is supplied: Non-numeric value specified for code level: <value>.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Error Code | Error Messages                                                                                                                                                                      |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 500        | When requesting China serial numbers and a non-numeric code level value is supplied: Non-numeric value specified for code level: <Value>.                                           |
| 500        | When requesting serial numbers for a template that is enabled to be provisioned externally: The serial number template is configured to not allow provisioning for <packagingCode>. |
| 500        | You are not authorized to access this service.                                                                                                                                      |

## Serial Number Response

### Guidelines

| Data Element |        |                                  |                 | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                    |
|--------------|--------|----------------------------------|-----------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S:Envelope   |        |                                  |                 | 1...1<br>-    | -      | <b>Required.</b> Soap envelope.                                                                                                                                                                                                                                                                                                                |
|              | S:Body |                                  |                 | 1...1<br>-    | -      | <b>Required.</b> Soap message body.                                                                                                                                                                                                                                                                                                            |
|              |        | ns2:serialNumbersRequestResponse |                 | 1...1<br>-    | -      | <b>Required.</b> The Serial Number Response message payload.                                                                                                                                                                                                                                                                                   |
|              |        |                                  | ReceivingSystem | 1...1<br>1/*  | String | Identifier for site manager system that requested the serial numbers. This value must match the configured value for the requesting system in the Serial Number Manager application configuration. Included in the response if the serial number range or list is returned, and omitted if an error response is returned (e.g. 0060354701201). |
|              |        |                                  | SendingSystem   | 1...1<br>1/*  | String | Identifier for the service responding to serial number requests. This value must match the configured value for the service in the SNM configuration. Included in the response if the serial number range or list is returned, and omitted if an error response is returned (e.g. SYSTEM-100001).                                              |
|              |        |                                  | ActionCode      | 1...1<br>1/*  | String | Value "C" is always returned. This value may be ignored. Included in response if serial number range or list is returned, omitted if error response is returned (e.g. C).                                                                                                                                                                      |
|              |        |                                  | EncodingType    | 1...1<br>1/*  | String | Specifies the encoding format for the type of serial numbers requested as provided in the request. SGTIN is used for both GTIN-14 and NTIN numbers. Included in response if the serial number range or list is returned, and omitted if an error response is returned.                                                                         |

| Data Element |  |  |            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |            |               |        | See the <a href="#">Encoding</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | IdType     | 1...1<br>1/*  | String | Specifies the type of serial numbers requested as provided in the request. Included in the response if the serial number range or list is returned, and omitted if an error response is returned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | Interval   | 1...1<br>-    | -      | If a serial number range is returned, specifies the serial number range. Only one of the following is returned: <ul style="list-style-type: none"> <li><a href="#">Interval</a></li> <li><a href="#">RandomizedNumberList</a></li> <li><a href="#">RfidException</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | NumberFrom | 1...1<br>1/*  | String | <b>Required.</b> If a serial number range is returned, specifies the starting serial number value. This element returns serial numbers in their fully formed format (e.g. AI(01)(21) formatted numbers for SGTINs are populated in the fields fully formed as "018038888293000621100000000001" with the "01" and "21" values present, and the AI(00) formatted numbers for SSCCs are populated in the fields fully formed as "00003888820001000011" with the "00" value present) (e.g. 010088202603022921100000000000).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | NumberTo   | 1...1<br>1/*  | String | <b>Required.</b> If a serial number range is returned, specifies the ending serial number value. This element returns serial numbers in their fully formed format (e.g. AI(01)(21) formatted numbers for SGTINs are populated in the fields fully formed as "018038888293000621100000000001" with the "01" and "21" values present, and the AI(00) formatted numbers for SSCCs are populated in the fields fully formed as "00003888820001000011" with the "00" value present) (e.g. 010088202603022921100000000009).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | ObjectKey  | 1...1<br>-    | -      | The key for the associated object (that holds the identifier type and value) for which the serial numbers were requested. Included in the response if a serial number range or list is returned, and omitted if an error response is returned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | Name       | 1...1<br>1/*  | String | <b>Required.</b> Specifies the identifier type of the associated object for which serial numbers were requested.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | Value      | 1...1<br>1/*  | String | <p><b>Required.</b> The corresponding identifier of the associated object for which serial numbers are requested (for example, the GTIN-14 identifier, NTIN 14-digit identifier, GS1 Company Prefix value, or China Subtype and attributes). If ObjectKey / Name requests an SSCC code using COMPANY_PREFIX, the format of the Value is as follows:(e.g. GTIN: 00882026030229).</p> <ul style="list-style-type: none"> <li><a href="#">&lt;Company Prefix&gt; &lt;Logistic Unit Indicator&gt;</a></li> </ul> <p>The Logistic Unit Indicator to request an SSCC for a pallet or case must match the configured value in Serial Number Manager. If ObjectKey / Name requests a CN_EDMC code using CN_SUBTYPE_LEVEL_RATIO, the format of the Value is as follows:</p> <ul style="list-style-type: none"> <li><a href="#">&lt;CN-Subtype Code&gt; &lt;CN Code Level&gt; &lt;CN Package Ratio&gt;</a></li> </ul> <p>The Code Level must be the configured code level value for the packaging hierarchy as configured in China Master Data that maps to a specific Resource Code. The PackageRatio is optional. If included, it must use the PackageRatio exactly as configured in China Master Data that maps to a specific Resource Code. It is used to disambiguate when there are serial numbers associated</p> |

| Data Element |  |  |                      |                     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|----------------------|---------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                      |                     |               |        | with multiple Resource Codes for the Code Level or Package Ratio of the Subtype. If it is omitted and there are multiple Resource codes for the same Code Level or Package Ratio, the system returns an error.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | ReferenceDocuments   |                     | 1...1<br>-    | -      | The reference documents passed in on request, returned with the response.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |                      | PONumber            | 1...1<br>1/*  | String | The PO number associated with serial number request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |                      | POLine              | 1...1<br>1/*  | String | <b>Conditionally required</b> if PONumber is present. The PO line number associated with serial number request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |                      | WorkOrderNumber     | 1...1<br>1/*  | String | The Work Order number associated with serial number request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                      | ReferenceIdentifier | 1...1<br>1/*  | String | The Reference Identifier associated with serial number request.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | RandomizedNumberList |                     | 1...1<br>-    | -      | <p>If a serial number range is returned, specifies the serial number range. Only one of following is returned:</p> <ul style="list-style-type: none"> <li>Interval</li> <li>RandomizedNumberList</li> <li>RfidException</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |                      | SerialNo            | 1...*<br>1/*  | String | <p><b>Required.</b> If a serial number list is returned, specifies the list of serial numbers in the SerialNo repeating element. This element returns serial numbers in their fully formed format (e.g. AI(01)(21) formatted numbers for SGTINs are populated in the fields fully formed as "018038888293000621100000000001" with the "01" and "21" values present, and the AI(00) formatted numbers for SSCCs are populated in the fields fully formed as "00003888820001000011" with the "00" value present) (e.g. 010088202501033821100011946933 and 00008820210000000005).</p> <p>If a serial number list is not returned (e.g. range is returned), the RandomizedNumberList element group is omitted.</p> <div>  SGTINs are mandatory for Russia serial numbers. </div> |
|              |  |  |                      | cryptoKey           | 0...*<br>0/4  | String | <b>Conditionally required</b> if for Russia serial numbers. The alphanumeric crypto key value retrieved from the CRPT Order Management Station. AI(91) denotes this value in the serial number (e.g. 911234).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |                      | cryptoCode          | 0...*<br>0/44 | String | <b>Conditionally required</b> if for Russia serial numbers. The crypto code value retrieved from the CRPT Order Management Station. This value can contain alphanumeric values as well as symbols. AI(92) denotes this value in the serial number. The following are valid symbols:(e.g. 92AusibQLCfH2fbOoXL3yU77gRBOsnhdKlJRGjZvl7gy0U).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Data Element |  |  |               |              |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                        |
|--------------|--|--|---------------|--------------|--|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |               |              |  |               |        | See <a href="#">Crypto Code Symbols</a> for valid symbols allowed in the <code>cryptoCode</code> .                                                                                                                                                 |
|              |  |  | RfidException |              |  | -<br>-        | -      | If an error is returned, specifies the error. Only one of the following values is returned: <ul style="list-style-type: none"> <li><code>Interval</code></li> <li><code>RandomizedNumberList</code></li> <li><code>RfidException</code></li> </ul> |
|              |  |  |               | errorCode    |  | 1..1<br>1/*   | String | The error code returned from Serial Number Manager.                                                                                                                                                                                                |
|              |  |  |               | errorMessage |  | 1..1<br>-     | String | <b>Required.</b> The error message description returned from Serial Number Manager (e.g. GTIN-14 identifier 00882026030229 is not in the permitted serial number request list.).                                                                   |

## Example

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:serialNumbersRequestResponse xmlns:ns2="urn:tracelink:soap">
      <SNResponse>
        <ReceivingSystem>LineSys11</ReceivingSystem>
        <SendingSystem>0060354701201</SendingSystem>
        <ActionCode>C</ActionCode>
        <EncodingType>SGTIN</EncodingType>
        <IDType>GS1_SER</IDType>
        <ObjectKey>
          <Name>GTIN</Name>
          <Value>00882025010338</Value>
        </ObjectKey>
        <RandomizedNumberList>
          <SerialNo cryptoKey="918567"
cryptoCode="9269139"926C194400G21300791248!74,35< ;,575162">010088202501033821100011946933</SerialNo>
          <SerialNo cryptoKey="918567"
cryptoCode="92JEIF840$JDFDSA!L;ASDJASDMASDLKFJANE;ASD>LHJA">010088202501033821100015310495</SerialNo>
          <SerialNo cryptoKey="918567"
cryptoCode="92546KLJDFG94N&ALDFJ^KLJBN346#NDSFL%LKJADADNRI">010088202501033821100018139350</SerialNo>
          <SerialNo cryptoKey="918567"
```

```

cryptoCode="92489345MDFSLK8945893,5HJDSFKL3$LKJSDGF&amp;LKJDFG">010088202501033821100012121992</SerialNo>
    <SerialNo cryptoKey="918567"
cryptoCode="92DSAFL48904!KASDFG^;LKJASDF%ASDFLKJ9ASL34JD34">010088202501033821100016483276</SerialNo>
    <SerialNo cryptoKey="918567"
cryptoCode="92%LSDAFASDF9084&amp;;LKLJ!;LKJA234ASDF724LK$LJ$;L">010088202501033821100012414042</SerialNo>
    <SerialNo cryptoKey="918567"
cryptoCode="92834HASKLJHSDA$KJH%;LHJLKSDF^ASDFKLJDSFLKW!;L">010088202501033821100016102891</SerialNo>
    <SerialNo cryptoKey="918567"
cryptoCode="9290KLKLNAB%KLJ&amp;KLJ^7DSFKLJASDG234KLJSD#4L&apos;ASD">010088202501033821100013578725</SerialNo>
    </RandomizedNumberList>
  </SNResponse>
</ns2:serialNumbersRequestResponse>
</S:Body>
</S:Envelope>

```

## Serial Number Manager Request and Response (Verify Brand)

### Serial Number Manager Request

#### Guidelines

Use this message to replenish serial numbers from the Verify Brand system.

**Message Type:** SNM\_REQUEST

**Info Exchange Display Name:** Serial Number Replenish Request

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element          | Occurs | Format | Length | Enums | Req | Description                                        |
|-----------------------|--------|--------|--------|-------|-----|----------------------------------------------------|
| snm:SNMRequestType    | 1...1  | -      | -      | -     | M   | Root data element.                                 |
| snm:ControlFileHeader | 1...1  | -      | -      | -     | M   | Serial Number Manager control header record group. |

| Data Element |  |                         | Occurs | Format | Length | Enums                        | Req | Description                                                                                                                                                                              |
|--------------|--|-------------------------|--------|--------|--------|------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:FileSenderNumber    | 1...1  | String | 1/*    | -                            | M   | File sender's company identifier. <sup>1</sup>                                                                                                                                           |
|              |  | cmn:FileReceiverNumber  | 1...1  | String | 1/*    | -                            | M   | File recipient's company identifier. <sup>2</sup>                                                                                                                                        |
|              |  | cmn:FileControlNumber   | 1...1  | String | 1/*    | -                            | M   | Unique file control ID number. <sup>3</sup>                                                                                                                                              |
|              |  | cmn:FileDate            | 1...1  | Date   | 0/*    | -                            | M   | Date file generated in XML YYYY-MM-DD format. <sup>4</sup>                                                                                                                               |
|              |  | cmn:FileTime            | 1...1  | Time   | 0/*    | -                            | M   | Time file generated in XML HH:MM:SSZ format (must be GMT). <sup>5</sup>                                                                                                                  |
|              |  | snm:MessageBody         | 1...1  | -      | -      | -                            | M   | Request Details.                                                                                                                                                                         |
|              |  | cmn:RequestId           | 1...1  | String | 1/*    | -                            | M   | Unique identifier for the serial number request. This is used to link the Serial Number Response from Serial Number Manager back to the originating Serial Number Response. <sup>6</sup> |
|              |  | cmn:PlantIdentifier     | 0...1  | String | 0/*    | -                            | O   | Identifier of plant location requesting serial numbers. Required by Serial Number Manager applications to track the plant that commissioned the serial numbers. <sup>7</sup>             |
|              |  | @type                   | 1...1  | String | 0/*    | <a href="#">LocationType</a> | M   | Plant location identifier type. Indicates the encoding type that is used to identify the requesting site location. <sup>8</sup>                                                          |
|              |  | cmn:ReferenceDocuments  | 0...1  | -      | -      | -                            | -   | Reference to specific manufacturing orders associated with the Serial Number Request. Indicates that the requested serial numbers will be used for the referenced manufacturing orders.  |
|              |  | cmn:PONumber            | 0...1  | String | 0/*    | -                            | O   | Purchase order (PO) number associated with Serial Number Request. <sup>9</sup>                                                                                                           |
|              |  | cmn:POLine              | 0...1  | String | 0/*    | -                            | O   | PO line number associated with Serial Number Request. <sup>10</sup>                                                                                                                      |
|              |  | cmn:WorkOrderNumber     | 0...1  | String | 0/*    | -                            | O   | Work order number associated with Serial Number Request. <sup>11</sup>                                                                                                                   |
|              |  | cmn:ReferenceIdentifier | 0...1  | String | 0/*    | -                            | O   | Reference identifier. <sup>12</sup>                                                                                                                                                      |

<sup>1</sup>8888884043588<sup>2</sup>10021144<sup>3</sup>0000000414236887<sup>4</sup>2016-09-15<sup>5</sup>09:09:09Z<sup>6</sup>20160201090909\_08806500018314<sup>7</sup>PFZFG01<sup>8</sup>GLN<sup>9</sup>4500018051<sup>10</sup>10<sup>11</sup>1001764-00<sup>12</sup>RI942013



| Data Element |  |                            | Occurs | Format  | Length | Enums                       | Req | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|----------------------------|--------|---------|--------|-----------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:NumberEncoding         | 1...1  | String  | 0/*    | <a href="#">Encoding</a>    | M   | Encoding format for the type of serial numbers that are being requested from the enumeration list (e.g. AI(01)+AI(21) for serialized GTIN, AI(00) for SSCC-18). <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                            |
|              |  | cmn:RU_CryptoCodeRequest   | 0...1  | Boolean | -      | -                           | M   | Indicates a request for Kazakhstan Crypto Codes, Russia crypto codes , or Uzbekistan Crypto Codes. The default value is "false". Valid values: <sup>2</sup> <ul style="list-style-type: none"> <li>true = Request crypto codes. Kazakhstan Crypto Codes, Russia crypto codes, or Uzbekistan Crypto Codes are expected in the Serial Number Manager Response.</li> <li>false = Do not request crypto codes. Kazakhstan Crypto Codes, Russia crypto codes , or Uzbekistan Crypto Codes are not expected in the Serial Number Manager Response.</li> </ul> |
|              |  | cmn:ObjectIdentifier       | 1...1  | Choice  | -      | -                           | M   | The identifier associated with the cmn:NumberEncoding for the serial numbers being requested. There is a choice element within the ObjectIdentifier data element, meaning that only one of the four options below can be populated.                                                                                                                                                                                                                                                                                                                     |
|              |  | cmn:CompanyPrefixObjectKey | 0...1  | String  | 1/*    | -                           | O   | The company prefix assigned by GS1 for the required SSCC numbers. Used only when cmn:NumberEncoding is for SSCC numbers. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  | @filterValue               | 0...1  | Integer | 0/*    | <a href="#">FilterValue</a> | O   | The Filter Value for the packaging level of the SSCC number that is being requested to indicate if the SSCC is for a pallet, mixed case, etc. This should be an integer with a value 0-7.                                                                                                                                                                                                                                                                                                                                                               |
|              |  | cmn:GTIN-14                | 0...1  | String  | 1/*    | -                           | O   | The GTIN-14 for the required SGTIN and AI(01)+AI(21) serial numbers. The GTIN-14 also informs logistical unit. Used only when cmn:NumberEncoding is for SGTIN and AI(01)+AI(21). <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                           |
|              |  | cmn:NTINObjectKey          | 0...1  | String  | 1/*    | -                           | C   | The NTIN for the required NTIN and AI(01)+AI(21) serial numbers. The NTIN also informs logistical unit. Used only when cmn:NumberEncoding is for SGTIN and AI(01)+AI(21). <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                  |
|              |  | cmn:Quantity               | 1...1  | Int     | 1/*    | -                           | M   | Quantity of serial numbers requested. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<snm:SNMRequestType xmlns:snm="urn:tracelink:mapper:sl:serial_number_manager"
```

<sup>1</sup>AI(01)+AI(21)

<sup>2</sup>false

<sup>3</sup>030074

<sup>4</sup>80388882930006

<sup>5</sup>30300743799027

<sup>6</sup>10000

```

xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
<snm:ControlFileHeader>
  <cmn:FileSenderNumber>8888884043588</cmn:FileSenderNumber>
  <cmn:FileReceiverNumber>10021144</cmn:FileReceiverNumber>
  <cmn:FileControlNumber>0000000414236887</cmn:FileControlNumber>
  <cmn:FileDate>2016-09-15</cmn:FileDate>
  <cmn:FileTime>09:09:09Z</cmn:FileTime>
</snm:ControlFileHeader>
  <snm:MessageBody>
    <cmn:RequestId>20160201090909_08806500018314</cmn:RequestId>
    <cmn:PlantIdentifier type="GLN">CMO_System</cmn:PlantIdentifier>
    <cmn:ReferenceDocuments>
      <cmn:PONumber>4500018051</cmn:PONumber>
      <cmn:POLine>10</cmn:POLine>
      <cmn:WorkOrderNumber>1001764-00</cmn:WorkOrderNumber>
      <cmn:ReferenceIdentifier>A12345</cmn:ReferenceIdentifier>
    </cmn:ReferenceDocuments>
    <cmn:NumberEncoding>AI (01)+AI (21)</cmn:NumberEncoding>
    <cmn:RU_CryptoCodeRequest>true</cmn:RU_CryptoCodeRequest>
    <cmn:ObjectIdentifier>
      <cmn:GTIN-14>80388882930006</cmn:GTIN-14>
    </cmn:ObjectIdentifier>
    <cmn:Quantity>10</cmn:Quantity>
  </snm:MessageBody>
</snm:SNMRequestType>

```

## Errors

| Data Element         | Error Message                                                                                                | Description                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Class 1 Errors       |                                                                                                              |                                                                                                                                                                          |
| cmn:NumberEncoding   | Valid number encoding code is required !!!                                                                   | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                                      |
| cmn:ObjectIdentifier | Only one of CompanyPrefixObjectKey OR GTIN14ObjectKey OR CNSubtypeObjectKey OR NTINObjectKey is required !!! | The error occurs if none, or more than one, of the following are present: cmn:CNSubtypeObjectKey, cmn:CompanyPrefixObjectKey, cmn:GTIN14ObjectKey, or cmn:NTINObjectKey. |
| Class 2 Errors       |                                                                                                              |                                                                                                                                                                          |

| Data Element                                                                                                                                                      | Error Message | Description |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|
| -                                                                                                                                                                 | -             | -           |
| Class 3 Errors                                                                                                                                                    |               |             |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |               |             |

## Serial Number Manager Response

### Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SNM\_RESPONSE

**Info Exchange Display Name:** Serial Number Replenish Response

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element      |               | Occurs | Format  | Length | Enums | Req | Description                                                                                                                                                                      |
|-------------------|---------------|--------|---------|--------|-------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CodeRequestReport |               | 1...1  | -       | -      | -     | M   | Root data element.                                                                                                                                                               |
|                   | Quantity      | 1...1  | Integer | 1/*    | -     | M   | The total quantity of UIDs contained in the file. <sup>1</sup>                                                                                                                   |
|                   | CompanyPrefix | 0...1  | Integer | 1/*    | -     | C   | <p>The company prefix (product number value) associated with the allocated UIDs.<sup>2</sup></p> <p>ⓘ At least one, and only one, of CompanyPrefix or AssociatedProducts, or</p> |

<sup>1</sup>100

<sup>2</sup>369999

| Data Element           |  |                   |       | Occurs | Format   | Length | Enums | Req | Description                                                                                                                                                                                                                                                                                                         |
|------------------------|--|-------------------|-------|--------|----------|--------|-------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |  |                   |       |        |          |        |       |     | <div>AssociatedProducts   <b>Value</b> is required.</div> <div>⚠ Mandatory if UID contains SSCCs.</div>                                                                                                                                                                                                             |
| ExtensionDigit         |  |                   |       | 0...1  | Integer  | 1/*    | -     | O   | This field not used.                                                                                                                                                                                                                                                                                                |
| DateCodesWereGenerated |  |                   |       | 1...1  | DateTime | 1/*    | -     | M   | The date/time the UIDs were generated in the Verify Platform. <sup>1</sup>                                                                                                                                                                                                                                          |
| CodeRequestKey         |  |                   |       | 1...1  | String   | 0/*    | -     | M   | The unique key associated with the UID request. <sup>2</sup>                                                                                                                                                                                                                                                        |
| AssociatedProducts     |  |                   |       | 1...1  | -        | -      | -     | M   | <p>Request identifier fields. Populated with TraceLink and Verify Brand request identifiers.</p> <div> <i>i</i> For SSCCs, an empty tag is sent.         </div> <div> <i>i</i> At least one, and only one, of CompanyPrefix or AssociatedProducts, or AssociatedProducts   <b>Value</b> is required.         </div> |
|                        |  | AssociatedProduct |       | 0...*  | -        | -      | -     | C   | <p>Message group header for looping group.</p> <div>⚠ Mandatory if UID contains SGTINs.</div>                                                                                                                                                                                                                       |
|                        |  |                   | Type  | 1...1  | String   | 0/*    | -     | M   | <p>The product reference identifier type. The most common value is "GTIN". Valid values:<sup>3</sup></p> <ul style="list-style-type: none"> <li>• GTIN</li> <li>• NTIN</li> </ul>                                                                                                                                   |
|                        |  |                   | Value | 1...1  | String   | 0/*    | -     | M   | The product reference identifier. The most common value is the class-level urn for GTIN, (e.g.                                                                                                                                                                                                                      |

<sup>1</sup>2016-12-22T22:34:28-06:00<sup>2</sup>b6fae276-85b8-46bf-b059-e4b176addf78<sup>3</sup>GTIN

| Data Element |          |     |            | Occurs | Format | Length | Enums | Req | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|----------|-----|------------|--------|--------|--------|-------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |          |     |            |        |        |        |       |     | <sup>1</sup><br> At least one, and only one, of CompanyPrefix or AssociatedProducts, or AssociatedProducts   <b>Value</b> is required.                                                                                                                                                                                                                                                        |
|              | SenderId |     |            | 1...1  | String | 0/*    | -     | M   | Identifier for the sender of the file.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              | UIDs     |     |            | 1...1  | -      | -      | -     | O   | Request identifier fields. Populated with TraceLink and Verify Brand request identifiers.                                                                                                                                                                                                                                                                                                                                                                                        |
|              |          | UID |            | 1...*  | -      | -      | -     | M   | Parent element for serial numbers in urn format, crypto key, and crypto code.                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |          |     | URN        | 1...1  | String | 0/*    | -     | M   | Explicit list of UIDs (serial numbers) in urn format. This is a repeating element. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                  |
|              |          |     | CryptoKey  | 1...1  | String | 0/*    | -     | M   | The crypto key value retrieved from the OMS owned by the pharmaceutical manufacturer. Crypto keys are alphanumeric and are 4 characters long. <sup>3</sup>                                                                                                                                                                                                                                                                                                                       |
|              |          |     | CryptoCode | 1...1  | String | 0/*    | -     | M   | The crypto key value retrieved from the OMS owned by the pharmaceutical manufacturer. Crypto codes can contain alphanumeric values as well as symbols and are either 44 or 88 characters long. AI(92) denotes this value in the serial number. The following are valid symbols: <sup>4</sup> <ul style="list-style-type: none"> <li>• !</li> <li>• &amp;quot; – (")</li> <li>• %</li> <li>• &amp;amp; – (&amp;)</li> <li>• &amp;apos; – (')</li> <li>• *</li> <li>• +</li> </ul> |

<sup>1</sup>urn:epc:id:sgtin:0369999.039801.\*

<sup>2</sup>urn:epc:id:sgtin:0369999.039801.1024500403956, urn:epc:id:sscc:0369999.2100010000

<sup>3</sup>91MTEy

<sup>4</sup>92d25lZmFvaTJoajM5NDhocjU5ODJoYXI4aDM5d2E4aGY7LCJBV0pFSTM5NA

| Data Element |          |            |           | Occurs | Format | Length | Enums | Req | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|----------|------------|-----------|--------|--------|--------|-------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |          |            |           |        |        |        |       |     | <ul style="list-style-type: none"> <li>• -</li> <li>• .</li> <li>• /</li> <li>• _</li> <li>• ,</li> <li>• :</li> <li>• ;</li> <li>• =</li> <li>• &amp;lt; - (&lt;)</li> <li>• &amp;gt; - (&gt;)</li> <li>• ?</li> </ul> <div>  TraceLink escapes the following special XML characters before sending the Serial Number Manager Response message:           <ul style="list-style-type: none"> <li>• &amp;quot; - (")</li> <li>• &amp;amp; - (&amp;)</li> <li>• &amp;apos; - (')</li> <li>• &amp;lt; - (&lt;)</li> <li>• &amp;gt; - (&gt;)</li> </ul> </div> |
|              | Location |            |           | 1...1  | -      | -      | -     | M   | Location group header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |          | References |           | 1...1  | -      | -      | -     | M   | Location reference identifier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |          |            | Reference | 1...1  | String | 0/*    | -     | M   | The location reference identifier type. The most common value is "SGLN". Location refers to the location the UIDs were requested for. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |          |            | Name      | 1...1  | String | 0/*    | -     | O   | The location reference identifier name. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>urn:epc:id:sgln:0851366005.00.0<sup>2</sup>CMO Partner #1

| Data Element |                      | Occurs | Format | Length | Enums | Req | Description                         |
|--------------|----------------------|--------|--------|--------|-------|-----|-------------------------------------|
|              | BusinessTransactions | 1...1  | -      | -      | -     | M   | Business Transactions group header. |
|              | BusinessTransaction  | 0...*  | -      | -      | -     | O   | Business Transaction group header.  |
|              | Type                 | 1...1  | String | 0/*    | -     | M   | Not used.                           |
|              | ID                   | 1...1  | String | 0/*    | -     | M   | Not used.                           |

## Example

```
<?xml version="1.0"?>
<CodeRequestReport xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Quantity>10</Quantity>
  <DateCodesWereGenerated>2018-07-12T15:20:43-05:00</DateCodesWereGenerated>
  <CodeRequestKey>762becab-38b7-443a-8c22-9b20cc9487b4</CodeRequestKey>
  <AssociatedProducts>
    <AssociatedProduct>
      <Type>GTIN</Type>
      <Value>urn:epc:idpat:sgtin:0311111.000000.*</Value>
    </AssociatedProduct>
  </AssociatedProducts>
  <UIDs>
    <UID>
      <URN>urn:epc:id:sgtin:0311111.000000.ADEEVIUICARC</URN>
      <CryptoKey>91EyMw</CryptoKey>
      <CryptoCode>92d251ZmFvaTJoajM5NDhocjU5ODJoYXI4aDM5d2E4aGY7</CryptoCode>
    </UID>
    <UID>
      <URN>urn:epc:id:sgtin:0311111.000000.ALUIHJMLHJHF</URN>
      <CryptoKey>91dlZg</CryptoKey>
      <CryptoCode>92NTczNDk4N2FzZG11aGZsaXd1OyxobGFnd2VmbG11aGFs</CryptoCode>
    </UID>
  </UIDs>
  <Location>
    <References>
      <Reference>urn:epc:id:sgln:0311111.00000.0</Reference>
    </References>
  </Location>
</CodeRequestReport>
```



```

    <Name>Sample CMO Location 1</Name>
  </Location>
  <BusinessTransactions/>
</CodeRequestReport>

```

## Errors

| Data Element           | Error Message                                                                                         | Description                                                                                                        |
|------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Class 1 Errors         |                                                                                                       |                                                                                                                    |
| CompanyPrefix          | Only one of CompanyPrefixObjectKey or GTIN14ObjectKey is required !!!                                 | The error occurs if both CompanyPrefix and AssociatedProduct are populated.                                        |
|                        | At least one of CompanyPrefixObjectKey or either of GTIN14ObjectKey and NTINObjectKey is required !!! | The error occurs if both CompanyPrefix and AssociatedProduct are empty or null.                                    |
| cmn:FileReceiverNumber | Valid FileReceiverNumber is required !!!                                                              | The error occurs if UID is empty or null.                                                                          |
| Value                  | Value is required if AssociatedProduct/Type = "GTIN" is populated !!!                                 | The error occurs if AssociatedProduct   <b>Type</b> = "GTIN", but the source is empty or null.                     |
|                        | Only one AssociatedProduct group is required !!!                                                      | The error occurs if more than one AssociatedProduct group is populated.                                            |
| UID                    | UID must be populated !!!                                                                             | The error occurs if the source is empty or null.                                                                   |
|                        | UID must contain an SGTIN or SSCC only !!!                                                            | The error occurs if the source does not contain an SGTIN or SSCC.                                                  |
|                        | UID must be an SSCC or an SGTIN only !!!                                                              | The error occurs if the source does not contain an SGTIN or SSCC.                                                  |
|                        | Valid SSCC or SGTIN serial number format is required !!!                                              | The error occurs if the source is not in valid SGTIN or SSCC format.                                               |
| URN                    | URN must contain an SGTIN or SSCC only !!!                                                            | The error occurs if the source does not equal "urn:epc:id:sgtin:".                                                 |
|                        | ExtensionDigit required for SSCCs !!!                                                                 | The error occurs if the source equals "urn:epc:id:sscc:" and CodeRequestReport   <b>ExtensionDigit</b> is missing. |
|                        | Valid SSCC or SGTIN serial number format is required !!!                                              | The error occurs if the source is invalid.                                                                         |
| CryptoKey              | CryptoKey is required if URN is present !!!                                                           | The error occurs if URN is present but the source is missing.                                                      |
| CryptoCode             | CryptoCode is required if URN is present !!!                                                          | The error occurs if URN is present but the source is missing.                                                      |
| Reference              | Location reference identifier type must be an SGLN !!!                                                | The error occurs if the source is not an SGLN.                                                                     |
|                        | Location reference identifier is required !!!                                                         | The error occurs if the source is empty or null.                                                                   |
| Class 2 Errors         |                                                                                                       |                                                                                                                    |

| Data Element                                                                                                                                                      | Error Message | Description |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|
| -                                                                                                                                                                 | -             | -           |
| Class 3 Errors                                                                                                                                                    |               |             |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |               |             |



# Remove crypto codes APIs

Use the following messages to remove crypto key and crypto code attributes from specified serial numbers. When a Remove Crypto Codes request is successful, the response includes an **AsyncID**. Use this token in the Fetch Remove Crypto Codes Result request to retrieve the status of the associated Remove Crypto Codes message.

Access to the Web Services Description Language (WSDL), where the XSDs reside along with other functionality information, is needed for integration. The URL for the WSDL contains the name of the TraceLink environment being accessed, followed by a specific app path. The following are the itest and prod WSDLs for removing crypto codes:

- *itest*: <https://itestapi.tracelink.com/soap/crypto?wsdl>
- *prod*: <https://api.tracelink.com/soap/crypto?wsdl>



Ensure authentication success before attempting to access the WSDL.

## Remove Crypto Codes (SOAP)

### Remove Crypto Codes Request

#### Guidelines

| Data Element     |                | Occurs Length | Type | Description                             |
|------------------|----------------|---------------|------|-----------------------------------------|
| soapenv:Envelope |                | 1...1<br>1/*  | -    | <b>Required.</b> The SOAP envelope.     |
|                  | soapenv:Header | 1...1<br>-    | -    | <b>Required.</b> Not used.              |
|                  | soapenv:Body   | 1...1<br>-    | -    | <b>Required.</b> The SOAP message body. |

| Data Element |  |                       |                          |           |      |                  | Occurs Length | Type | Description                                                                                                                                                                                                                                                                            |
|--------------|--|-----------------------|--------------------------|-----------|------|------------------|---------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | urn:RemoveCryptoCodes |                          |           |      |                  | 1...1<br>-    | -    | <b>Required.</b> The body for the Remove Crypto Codes request.                                                                                                                                                                                                                         |
|              |  |                       | RemoveCryptoCodesRequest |           |      |                  | 1...1<br>-    | -    | <b>Required.</b> The Remove Crypto Codes Request element group.                                                                                                                                                                                                                        |
|              |  |                       |                          | Items     |      |                  | 0...1<br>-    | -    | <b>Conditionally required</b> if <b>GTIN</b> and <b>LotNumber</b> are not present. The list of serial numbers from which to remove the crypto key and crypto code attributes.                                                                                                          |
|              |  |                       |                          |           | Item |                  | 1...*<br>-    | -    | <b>Required.</b> The serial number and its attributes.                                                                                                                                                                                                                                 |
|              |  |                       |                          |           |      | @sn              | 1...1<br>1/*  | -    | <b>Required.</b> The serial number in AI(01)+AI(21) format.                                                                                                                                                                                                                            |
|              |  |                       |                          |           |      | @namespace       | 0...1<br>0/*  | -    | Not used. The namespace of the serial number.                                                                                                                                                                                                                                          |
|              |  |                       |                          |           |      | @orderItemNumber | 0...1<br>0/*  | -    | Not used. The order item number associated with the serial number.                                                                                                                                                                                                                     |
|              |  |                       |                          |           |      | @barcodeContent  | 0...1<br>0/*  | -    | Not used. The actual barcode content of the serial number.                                                                                                                                                                                                                             |
|              |  |                       |                          | GTIN      |      |                  | 0...1<br>0/14 | -    | <b>Conditionally required</b> if either of the following is true: <ul style="list-style-type: none"> <li><b>Items</b> is not present.</li> <li><b>LotNumber</b> is present.</li> </ul> The GTIN of the serial numbers from which to remove the crypto key and crypto code attributes.  |
|              |  |                       |                          | Lotnumber |      |                  | 0...1<br>0/*  | -    | <b>Conditionally required</b> if either of the following is true: <ul style="list-style-type: none"> <li><b>Items</b> is not present.</li> <li><b>GTIN</b> is present.</li> </ul> The lot number of the serial numbers from which to remove the crypto key and crypto code attributes. |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
```

```
<soapenv:Header/>
<soapenv:Body>
  <urn:RemoveCryptoCodes>
    <RemoveCryptoCodesRequest>
      <Items>
        <Item sn="01508820250106612184927439238FDSJHK" namespace="" orderItemNumber=""
barcodeContent=""/>
        <Item sn="0150882025010661215KL2J3D9JNF4K4L59" namespace="" orderItemNumber=""
barcodeContent=""/>
        <Item sn="0150882025010661212LKJ3409UDJN349DH" namespace="" orderItemNumber=""
barcodeContent=""/>
      </Items>
      <GTIN></GTIN>
      <LotNumber></LotNumber>
    </RemoveCryptoCodesRequest>
  </urn:RemoveCryptoCodes>
</soapenv:Body>
</soapenv:Envelope>
```

Errors

There are no errors for the Remove Crytpo Codes message. Errors are returned when using the Fetch Remove Crypto Codes Result message.

Remove Crypto Codes Response

Guidelines

| Data Element |                       | Occurs Length | Type | Description                                                |
|--------------|-----------------------|---------------|------|------------------------------------------------------------|
| S:Envelope   |                       | 1...1<br>-    | -    | <b>Required.</b> The SOAP envelope.                        |
|              | S:Body                | 1...1<br>-    | -    | <b>Required.</b> The SOAP message body.                    |
|              | ns3:RemoveCryptoCodes | 1...1         | -    | <b>Required.</b> The Remove Crypto Codes response message. |

| Data Element |  |  |  |  |  |                   | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|--|-------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                   | -             |         |                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | TLResponse        | 1...1<br>-    | -       | <b>Required.</b> The message response.                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | Success           | 1...1<br>0/5  | Boolean | <b>Required.</b> Indicates if the message was successful. Valid values: <ul style="list-style-type: none"> <li><code>true</code> – The Remove Crypto Codes request was successful.</li> <li><code>false</code> – The Remove Crypto Codes request was not successful.</li> </ul>                                                                                                                                               |
|              |  |  |  |  |  | TLResponsePayload | 1...1<br>-    | -       | <b>Required.</b> The asynchronous response ID element group.                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | AsyncID           | 1...1<br>0/36 | String  | <b>Required.</b> Use this token to retrieve the processing status in the Fetch Remove Crypto Codes Result message.                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | IsComplete        | 1...1<br>0/5  | Boolean | <b>Required.</b> Indicates if the Remove Crypto Codes request is complete. Valid values: <ul style="list-style-type: none"> <li><code>true</code> – the Remove Crypto Codes Request is complete.</li> <li><code>false</code> – the Remove Crypto Codes Request is not complete. Use the <b>AsyncID</b> in the Fetch Remove Crypto Codes Result message to retrieve the results of the Remove Crypto Codes message.</li> </ul> |

## Example

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:RemoveCryptoCodesResponse xmlns:ns2="http://tracelink.com/som" xmlns:ns3="urn:tracelink:soap">
      <TLResponse>
        <Success>true</Success>
        <TLResponsePayload xsi:type="ns2:TlAsyncResponseType" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <AsyncID>d770f5c1-5ba7-4c2d-a4bd-2093ef101ddb</AsyncID>
          <IsComplete>false</IsComplete>
        </TLResponsePayload>
      </TLResponse>
    </ns3:RemoveCryptoCodesResponse>
  </S:Body>
</S:Envelope>

```



# Fetch Remove Crypto Codes Result (SOAP)

## Fetch Remove Crypto Codes Result Request

### Guidelines

| Data Element     |                |                                 | Occurs<br>Length | Type   | Description                                                                               |
|------------------|----------------|---------------------------------|------------------|--------|-------------------------------------------------------------------------------------------|
| soapenv:Envelope |                |                                 | 1...1<br>1/*     | -      | <b>Required.</b> The SOAP envelope.                                                       |
|                  | soapenv:Header |                                 | 1...1<br>-       | -      | <b>Required.</b> Not used.                                                                |
|                  | soapenv:Body   |                                 | 1...1<br>-       | -      | <b>Required.</b> The SOAP message body.                                                   |
|                  |                | urn:FetchRemoveCryptoCodeResult | 1...1<br>-       | -      | <b>Required.</b> The Fetch Remove Crypto Codes Result request message.                    |
|                  |                | RequestId                       | 1...1<br>0/*     | String | <b>Required.</b> The <b>AsyncID</b> received in the Remove Crypto Codes response message. |

### Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:FetchRemoveCryptoCodeResult>
      <RequestId>bbda2bfe-0b35-49bb-aa4b-09a0478abce0</RequestId>
    </urn:FetchRemoveCryptoCodeResult>
  </soapenv:Body>
</soapenv:Envelope>
```

## Errors

| Error Code | Error Messages                                                                                    |
|------------|---------------------------------------------------------------------------------------------------|
| VALIDATION | Incorrect arguments: Only specify serial numbers in the Items list or both a GTIN and Lot Number. |
| VALIDATION | The following serial number(s) in the request do not exist: <serialNumber1>, <serialNumber2>.     |
| VALIDATION | LotNumber <lotNumber> not found for GTIN <GTINValue>.                                             |

## Fetch Remove Crypto Codes Result Response

### Guidelines

- If **Success** = **true** and neither **TLResponsePayload** nor **ExceptionReturn** is present, the serial number(s) in the Remove Crypto Codes message successfully had their crypto key and crypto code attributes removed.
- If **Success** = **true** and **TLResponsePayload** is present, the Remove Crypto Codes message was successfully submitted but is still being processed.
- If **Success** = **true** and **ExceptionReturn** is present, the Remove Crypto Codes message was successfully submitted but there is at least one error.

| Data Element                            | Occurs Length | Type | Description                                                             |
|-----------------------------------------|---------------|------|-------------------------------------------------------------------------|
| S:Envelope                              | 1...1<br>-    | -    | <b>Required.</b> The SOAP envelope.                                     |
| S:Body                                  | 1...1<br>-    | -    | <b>Required.</b> The SOAP message body.                                 |
| ns3:FetchRemoveCryptoCodeResultResponse | 1...1<br>-    | -    | <b>Required.</b> The Fetch Remove Crypto Codes Result response message. |
| TLResponse                              | 1...1<br>-    | -    | <b>Required.</b> The message response.                                  |

| Data Element |  |  |                   |               |                  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                               |
|--------------|--|--|-------------------|---------------|------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                   | Success       |                  | 1...1<br>0/5  | Boolean | <b>Required.</b> Indicates if the message was successful. Valid values: <ul style="list-style-type: none"> <li><code>true</code> – The Fetch Remove Crypto Codes Result request was successful.</li> <li><code>false</code> – The Fetch Remove Crypto Codes Result request was not successful.</li> </ul> |
|              |  |  | TLResponsePayload |               |                  | 0...1<br>-    | -       | The container for the asynchronous response ID.                                                                                                                                                                                                                                                           |
|              |  |  |                   | AsyncID       |                  | 0...1<br>0/36 | String  | <b>Required.</b> If the Remove Crypto Codes message associated with the <b>RequestId</b> given in the Fetch Remove Crypto Codes request is incomplete, or the <b>RequestId</b> is invalid, the <b>RequestId</b> from the request is returned here.                                                        |
|              |  |  |                   | IsComplete    |                  | 0...1<br>0/5  | Boolean | <b>Required.</b> Indicates if the Remove Crypto Codes request is not complete. Valid values: <ul style="list-style-type: none"> <li><code>false</code> – The Remove Crypto Codes Request is not complete.</li> </ul>                                                                                      |
|              |  |  | ExceptionReturn   |               |                  | 0...1<br>-    | -       | The element group for errors.                                                                                                                                                                                                                                                                             |
|              |  |  |                   | CallException |                  | 0...1<br>-    | -       | <b>Required.</b> Indicates that there is an error.                                                                                                                                                                                                                                                        |
|              |  |  |                   |               | ExceptionCode    | 0...1<br>0/*  | String  | <b>Required.</b> The exception code associated with the error.                                                                                                                                                                                                                                            |
|              |  |  |                   |               | ExceptionMessage | 0...1<br>0/*  | String  | <b>Required.</b> The specific error from the request message.                                                                                                                                                                                                                                             |

## Example

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:FetchRemoveCryptoCodesResultResponse xmlns:ns2="http://tracelink.com/som"
xmlns:ns3="urn:tracelink:soap">
      <TLResponse>
        <Success>true</Success>
        <TLResponsePayload xsi:type="ns2:TAsyncResponseType" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
          <AsyncID>bbda2bfe-0b35-49bb-aa4b-09a0478abce0</AsyncID>
          <IsComplete>>false</IsComplete>

```

```
        </TLResponsePayload>  
      </TLResponse>  
    </ns3:FetchRemoveCryptoCodesResultResponse>  
  </S:Body>  
</S:Envelope>
```



# **Manufacturing and packaging**





# Product release APIs

## Why do I use these messages?

Use the following messages to update the status of serial numbers within a lot to **Quality Released**, indicating that the lot is ready to be released to the market (e.g. it has passed quality inspection).

 Serial numbers can be released before being commissioned in TraceLink. If serial numbers are not associated with the item code and lot number specified in the message, TraceLink preserves the item code and lot number association and updates serial numbers for the lot with the Product Release item attribute when they are commissioned.

## Which reports do these messages generate?

These messages generate one of the following reports in the Russia Compliance application if their contents meet the report conditions:

- [OMS Foreign Utilisation](#) and [915 - Multi Pack](#) (generated together) – The OMS Foreign Utilisation report captures information about serialized items that are manufactured in a country other than Russia before being imported to Russia for distribution and the 915 - Multi Pack report captures the aggregation hierarchy of those items.
- [313 - Register Product Emission](#) – The 313 - Register Product Emission captures information about serialized items that are manufactured and released in Russia.

## Product Release (XML)

### Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 4 hours.

**Message Type:** SOM\_PRODUCT\_RELEASE.

**Info Exchange Display Name:** Product Release



ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element                 |                       |                          | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------|-----------------------|--------------------------|----------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| som:SOMProductReleaseMessage |                       |                          | 1...1<br>-     | -      | <b>Required.</b> This is the root element of the Product Release message.                                                                                                                                                                                                                                                                                                                                                       |
|                              | som:ControlFileHeader |                          | 1...1<br>-     | -      | <b>Required.</b> The ControlFileHeader element is where the message document's header information resides.                                                                                                                                                                                                                                                                                                                      |
|                              |                       | cmn:FileSenderNumber     | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's sender (e.g. 8888882028655).                                                                                                                                                                                                                                                                                                                                              |
|                              |                       | cmn:FileReceiverNumber   | 1...11/20      | String | <b>Required.</b> The company identifier of the file's recipient (e.g. 8888882028677).                                                                                                                                                                                                                                                                                                                                           |
|                              |                       | cmn:FileControlNumber    | 1...11/20      | String | <b>Required.</b> This field indicates the message's unique file control ID number. A file control ID number is mandatory for all messages (e.g. 20130821063132).                                                                                                                                                                                                                                                                |
|                              |                       | cmn:FileDate             | 1...1<br>10/10 | Date   | <b>Required.</b> This field indicates the date that the message is sent. The date is in YYYY-MM-DD format when generated in XML (e.g. 2013-08-21).                                                                                                                                                                                                                                                                              |
|                              |                       | cmn:FileTime             | 1...18/8       | Time   | <b>Required.</b> This field indicates the time that the message is sent. The date is in HH:MM:SSZ format when generated in XML. The system expects the "Z" to be appended; however if it is not included, the system assumes that the time is GMT and therefore appends the Z (e.g. 06:31:32Z).                                                                                                                                 |
|                              | som:MessageBody       |                          | 1...1<br>-     | -      | <b>Required.</b> The message body contains the main contents of the message.                                                                                                                                                                                                                                                                                                                                                    |
|                              |                       | cmn:LocationId           | 0...1<br>0/34  | String | This value specifies the identifier of the facility/warehouse to scope the Product Release status update for the serial numbers matching the specified item code and lot number, only at the specified location. If the location is omitted, the Product Release status update will be applied globally to all matching serial numbers in the system (e.g. 8888882028655).                                                      |
|                              |                       | choice%1                 | -<br>-         | Choice | <b>Required.</b> One of the following options must be chosen, but not both: <ul style="list-style-type: none"> <li>Option 1: <a href="#">InternalMaterialCode</a></li> <li>Option 2: <a href="#">CountryDrugCode</a></li> </ul>                                                                                                                                                                                                 |
|                              |                       | cmn:InternalMaterialCode | 0...1<br>1/*   | String | <b>Conditionally required</b> if cmn:CountryDrugCode is not present. This is Option 1 for the MessageBody. It is used to identify the product using the internal material number configured in the Product Master Data. Specifying an internal material number will update all serial numbers at all packaging levels (e.g. item, case) that are linked to the internal material number and specified lot number (e.g. 100253). |

| Data Element |  |                            | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|----------------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:CountryDrugCode        | 0...1<br>1/*  | String   | <b>Conditionally required</b> if cmn:InternalMaterialCode is not present. This is Option 2 for the MessageBody. Use to identify the product using the national drug code (e.g. NDC, Swissmedic, PZN) configured in Product Master Data. Specifying a national drug code will update all serial numbers at all packaging levels (e.g. item, case) that are linked to the national drug code and specified lot number (e.g. 0069-4220-66). |
|              |  | @type                      | 1...1<br>1/*  | String   | <b>Required.</b> Country drug code type.<br>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                   |
|              |  | cmn:LotNumber              | 1...1<br>1/*  | String   | <b>Required.</b> The lot number associated with the cmn:InternalMaterialCode or cmn:CountryDrugCode specified above to identify the serial numbers to be updated (e.g. A12345).                                                                                                                                                                                                                                                          |
|              |  | cmn:QualityControlEntityId | 0...1<br>0/*  | String   | <b>Conditionally required</b> if bizTransactionList in the ObjectEvent for Product Release Events is populated, or if at least one Target Market in Product Master Data = "RU" and the lot was commissioned outside of Russia. Business or location identifier for the entity responsible for quality control (e.g. 0882028677010).                                                                                                      |
|              |  | @type                      | 1...1<br>1/*  | String   | <b>Required.</b> Business or location type of the quality control entity identifier (e.g. GLN).<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                      |
|              |  | cmn:TransactionIdentifier  | 0...*<br>0/*  | String   | <b>Optional.</b> The transaction identifier associated with the released product (e.g. 45006290016).                                                                                                                                                                                                                                                                                                                                     |
|              |  | @type                      | 1...1<br>1/*  | String   | <b>Required.</b> The transaction identifier type (e.g. CERTIFICATECONFORMITY). Valid values: <ul style="list-style-type: none"> <li>• <a href="#">CERTIFICATECONFORMITY</a></li> <li>• <a href="#">CIVILCIRCULATION</a></li> <li>• <a href="#">DECLARATIONCONFORMITY</a></li> <li>• <a href="#">STATECONFIRMATION</a></li> </ul> See the <a href="#">TransactionId</a> enumeration list for valid values.                                |
|              |  | @date                      | 0...1<br>0/*  | Date     | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <a href="#">RU</a> and the lot was commissioned in Russia. The transaction identifier date in YYYY-MM-DD format (e.g. 2019-03-18).                                                                                                                                                                                                                  |
|              |  | cmn:EventDateTime          | 0...1<br>0/*  | DateTime | Timestamp of the date and time of the product release with the UTC time zone indicator in XML YYYY-MM-DDTHH:MM:SS:mmZ format (e.g. 2019-03-18T22:08:021Z).                                                                                                                                                                                                                                                                               |
|              |  | cmn:ProductionQuantity     | 0...*<br>-    | -        | Production quantity element group.                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  | choice1                    | 1...1<br>-    | Choice   | <b>Required.</b> Choice element of either PackagingItemCode or CompanyPrefix.                                                                                                                                                                                                                                                                                                                                                            |

| Data Element |  |  |                       | Occurs Length | Type    | Description                                                                                                                                                                                                    |
|--------------|--|--|-----------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:PackagingItemCode | 0...1<br>0/*  | String  | <b>Conditionally required</b> if cmn:CompanyPrefix is not populated. Option 1 for choice1. Identifies the product using the packaging level item code configured in Product Master Data (e.g. 50300694220667). |
|              |  |  | @type                 | 0...1<br>0/*  | String  | <b>Required.</b> Packaging item code type (e.g. GTIN-14). See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                  |
|              |  |  | cmn:CompanyPrefix     | 0...1<br>0/*  | String  | <b>Conditionally required</b> if cmn:PackagingItemCode is not populated. Option 2 for choice1. Identifies the company prefix assigned by GS1 for the released product (e.g. 503006).                           |
|              |  |  | cmn:PackagingLevel    | 1...1<br>1/*  | String  | <b>Required.</b> The packaging level of the commissioned item (e.g. EA). See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                             |
|              |  |  | cmn:QuantityReported  | 1...1<br>-    | Integer | <b>Required.</b> Reported quantity of the released product (e.g. 100).                                                                                                                                         |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<SOMProductReleaseMessage xmlns="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>0000000001</cmn:FileControlNumber>
    <cmn:FileDate>2012-06-30</cmn:FileDate>
    <cmn:FileTime>06:30:32Z</cmn:FileTime>
  </ControlFileHeader>
  <MessageBody>
    <cmn:LocationId>8888882028655</cmn:LocationId>
    <cmn:InternalMaterialCode>100253</cmn:InternalMaterialCode>
    <cmn:LotNumber>A12345</cmn:LotNumber>
    <cmn:QualityControlEntityId type="GLN">0882028677010</cmn:QualityControlEntityId>
    <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-03-18">45006290016</cmn:TransactionIdentifier>
    <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-03-18">66006290017</cmn:TransactionIdentifier>
    <cmn:EventDateTime>2019-03-18T22:08:021Z</cmn:EventDateTime>
    <cmn:ProductionQuantity>
```

```

    <cmn:PackagingItemCode type="GTIN-14">50300694220667</cmn:PackagingItemCode>
    <!-- <cmn:CompanyPrefix>503006</cmn:CompanyPrefix> -->
    <cmn:PackagingLevel>EA</cmn:PackagingLevel>
    <cmn:QuantityReported>100</cmn:QuantityReported>
  </cmn:ProductionQuantity>
</MessageBody>
</SOMProductReleaseMessage>

```

## Errors

| Data Element                       | Error Message                                                                            | Description                                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                     |                                                                                          |                                                                                                                |
| choice1                            | Only one of either packaging item code or company prefix may be present !!!              | The error occurs if both cmn:PackagingItemCode and cmn:CompanyPrefix are populated, or both are empty or null. |
| cmn:FileControlNumber              | Data Error: FileControlNumber occurs fewer times than its minimum number of occurrences  | The error occurs if the source is empty or null.                                                               |
| cmn:FileDate                       | Data Error: FileDate occurs fewer times than its minimum number of occurrences           |                                                                                                                |
| cmn:FileReceiverNumber             | Data Error: FileReceiverNumber occurs fewer times than its minimum number of occurrences |                                                                                                                |
| cmn:FileSenderNumber               | Data Error: FileSenderNumber occurs fewer times than its minimum number of occurrences.  |                                                                                                                |
| cmn:FileTime                       | Data Error: FileTime occurs fewer times than its minimum number of occurrences           |                                                                                                                |
| cmn:InternalMaterialCode           | Only one of either InternalMaterialCode or CountryDrugCode must be present in source !!! | The error occurs if both cmn:InternalMaterialCode and cmn:CountryDrugCode are either populated or null.        |
| cmn:LotNumber                      | Lot number is required !!!                                                               | The error occurs if the source is empty or null.                                                               |
| cmn:PackagingLevel                 | Valid packaging level code required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                  |
| cmn:QualityControlEntityId         | Quality control entity Id is required if TransactionIdentifier is populated !!!          | The error occurs if cmn:TransactionIdentifier is populated, but the source is empty or null.                   |
| cmn:QualityControlEntityId   @type | Valid party type required if QualityControlEntityId is populated !!!                     | The error occurs if the source is present, but there is no matching entry in the lookup file.                  |

| Data Element                                                          | Error Message                                                                                                                                                                                        | Description                                                                                                                                                                    |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cmn:QuantityReported                                                  | Quantity reported is required !!!                                                                                                                                                                    | The error occurs if the source is empty or null.                                                                                                                               |
| cmn:TransactionIdentifier   <b>@type</b>                              | Valid transaction identifier type is required if TransactionIdentifier is populated !!!                                                                                                              | The error occurs if cmn:TransactionIdentifier is populated but the source is empty or null, or is not a valid value from the enumeration list.                                 |
| som:ControlFileHeader                                                 | Data Error: ControlFileHeader occurs fewer times than its minimum number of occurrences.                                                                                                             | The error occurs if the source is empty or null.                                                                                                                               |
| som:MessageBody   <b>choice%1</b>                                     | Only one of either InternalMaterialCode or CountryDrugCode must be present in source !!!                                                                                                             | The error occurs if both cmn:InternalMaterialCode and cmn:CountryDrugCode are either populated or null.                                                                        |
| som:SOMProductReleaseMessage                                          | Unable to read input data for business object SOMProductReleaseMessage due to a XML Error.                                                                                                           | The error occurs if the source is empty or null.                                                                                                                               |
| <b>Class 2</b>                                                        |                                                                                                                                                                                                      |                                                                                                                                                                                |
| cmn:QualityControlEntityId                                            | Quality Control Entity ID is required for products that are commissioned outside of Russia and sold in Russia.                                                                                       | The error occurs if a Target Market in Product Master Data for the released product = "RU" and the lot was commissioned outside of Russia., but the source is empty or null.   |
| cmn:TransactionIdentifier                                             | A Transaction Identifier for either 'Declaration of Conformity' or 'Certificate of Conformity' is required for products that are commissioned and sold in Russia.                                    | The error occurs if a Target Market in Product Master Data for the released product = "RU" and the lot was commissioned and sold in Russia, but the source is empty or null.   |
| cmn:TransactionIdentifier   <b>@date</b>                              | Transaction Identifier Date is required for products that are commissioned and sold in Russia.                                                                                                       | The error occurs if a Target Market in Product Master Data for the released product = "RU" and the lot was commissioned in Russia, but the source is empty or null.            |
| cmn:TransactionIdentifier   <b>@type</b>                              | A Transaction Identifier for either 'Declaration of Conformity' or 'Certificate of Conformity' is required for products sold in Russia.                                                              | The error occurs if a Target Market in Product Master Data for the released product = "RU" , but the source does not equal "CERTIFICATECONFORMITY" or "DECLARATIONCONFORMITY". |
| country drug code type                                                | Unsupported Country Drug Code Type.                                                                                                                                                                  | The error occurs if source is not supported.                                                                                                                                   |
| inFilename, origFilename, origCompanyname, origFileDate, cntrlID      | File <inFilename> is a potential duplicate match with file <origFilename> sent from <origCompanyname> received on <origFileDate>, based on both files having the same File Control Number <cntrlID>. | The error occurs if file is a duplicate.                                                                                                                                       |
| item code type                                                        | Unsupported Packaging Item Code Type.                                                                                                                                                                | The error occurs if source is not supported.                                                                                                                                   |
| paramcount (countrydrugcode, internalmaterialcode, packagingitemcode) | Incorrect number of item codes specified - found <n>, expected 1. format(paramcount.toString).                                                                                                       | The error occurs if more than one item code is specified at a time (e.g. country drug code, internal material code, item code).                                                |

| Data Element                                                                                                                                                      | Error Message                                                                                                          | Description                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| persona credential                                                                                                                                                | No API Key exists for user <username> of service <servicename>.<br>format(user.getOrNull("null"),service.serviceName). | The error occurs if source is not found by service id. |
| Class 3                                                                                                                                                           |                                                                                                                        |                                                        |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                        |                                                        |

## Product Release Event (EPCIS v1.2)

### Guidelines

Use this message to exchange data between a CMO and a Pharmaceutical Manufacturer. This message communicates Commission, Aggregation, and Product Release data in a single message.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 4 hours.

**Message Type:** SOM\_PRODUCT\_RELEASE\_EVENT

**Info Exchange Display Name:** Product Release

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        |                                     |                    |                 | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|-------------------------------------|--------------------|-----------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument |                                     |                    |                 | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                     | @schemaVersion                      |                    |                 | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     | @creationDate                       |                    |                 | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     | EPCISHeader                         |                    |                 | 0...1<br>-    | -        | <b>Required.</b> XML file control header record. The following use cases are supported in this message: <ul style="list-style-type: none"> <li>Commission or Transformation + Aggregation + Product Release events: no Decommission/Destroy reported.</li> <li>Commission or Transformation + Product Release events: product is not aggregated and no Decommission/Destroy reported.</li> <li>Commission or Transformation + Product Release + Decommission/Destroy events: product is not aggregated, Decommission/Destroy events recorded.</li> <li>Commission or Transformation + Aggregation + Decommission and/or Destroy + Product Release events: all events may be present.</li> </ul> <div>  Commission or Transformation and Product Release events are mandatory; all other events are optional. </div> |
|                     | sbdh:StandardBusinessDocumentHeader |                    |                 | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                     |                                     | sbdh:HeaderVersion |                 | 1...1<br>0/*  | String   | <b>Required.</b> The version number of the SBDH standard used. The <b>sbdh:HeaderVersion</b> must equal 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                     |                                     | sbdh:Sender        |                 | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the Sender party of the message, representing the organization which created the standard business document. The <b>sbdh:Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                     |                                     |                    | sbdh:Identifier | 1...1<br>1/*  | String   | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>4</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example: <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>1.2<sup>2</sup>2016-12-18T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507



| Data Element |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|-----------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                             |               |        | <ul style="list-style-type: none"> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <p> GLN will not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String | <p><b>Required.</b> The Authority was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. Update made in December 2016 changed this to take additional values.<sup>1</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | sbdh:Receiver               | 1...*<br>-    | -      | <p><b>Required.</b> A unique identification key for the direct Receiver party of the message, representing the organization which receives the standard business document. The <b>sbdh:Receiver</b> element must be used only once with GS1 XML messages.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | sbdh:Identifier             | 1...*<br>-    | String | <p><b>Required.</b> The value of the <b>sbdh:Identifier</b> element may be a GLN, SGLN, or any other supported business party type.<sup>2</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li><a href="urn:epc:id:sgln:088202.867701.0">urn:epc:id:sgln:088202.867701.0</a></li> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <p> GLN will not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String | <p><b>Required.</b> The Authority was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. Update made in December 2016 changed this to take additional values.<sup>3</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -      | <p><b>Required.</b></p> <p>Contains the identification group for the message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | sbdh:Standard               | 1...1<br>0/*  | String | <p><b>Required.</b> The name of the document standard contained in the payload. The <b>sbdh:Standard</b> value must equal <a href="#">EPCglobal</a>.<sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | sbdh:TypeVersion            | 1...1         | String | <p><b>Required.</b> The version of the document included in the payload of SBDH. This is the "complete" version of the document itself</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>GLN<sup>2</sup>0614141123452<sup>3</sup>GLN<sup>4</sup>EPCglobal

| Data Element |  |  |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--------------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                          |               |          | . The <b>sbdh:TypeVersion</b> must equal <b>1.0</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Description which contains reference information which uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier identifies this document as being distinct from others. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> This element identifies the type of the document. The <b>sbdh:Type</b> must equal <b>Events</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> Date and time of the SBDH document creation. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | extension                | 0...1<br>-    | -        | Header extension area with master data attributes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | EPCISMasterData          | 0...1<br>-    | -        | <p>Master data extension header. May contain product master data attributes for Commissioning event and/or location address information for Decommissioning and/or Destroy events. Optional.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li>Product master data = <b>urn:epcglobal:epcis:vtype:EPCClass</b></li> <li>Party master data = <b>urn:epcglobal:epcis:vtype:Location</b></li> </ul> <p><b>❗</b> Full GS1-conformance requires that all product and party master data be stored in the EPCIS header extension EPCISMasterData   VocabularyList   Vocabulary   VocabularyElementList   <b>VocabularyElement</b>. It is strongly urged that all product master data for Commissioning and party address info for Decommissioning and Destroying events be sent in the VocabularyElement within the EPCISMasterData header extension.</p> |
|              |  |  | VocabularyList           | 1...1<br>-    | -        | <b>Required.</b> Vocabulary list group master data elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | Vocabulary               | 0...*<br>-    | -        | <p>Looping vocabulary element with discrete item master and/or party master data element groups. <b>Vocabulary</b> will occur only once for all item master entries present in message, if group is populated.</p> <p>Group is optional. If it does not appear in master data header extension, no error will be thrown.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | @type                    | 1...1<br>0/*  | String   | <b>Required.</b> Vocabulary type identifying product master data elements. Product master data is defined by VocabularyElement   @id.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>1.0<sup>2</sup>201609201745200001<sup>3</sup>Events<sup>4</sup>2016-12-18T22:08:02Z

| Data Element |  |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--|-----------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                       |               |        | Valid value: <code>urn:epcglobal:epcis:vtype:EPCClass</code> = product master data. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  |  | VocabularyElementList | 0...1<br>-    | -      | List of vocabulary elements containing master data attributes for each unique product code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | VocabularyElement     | 0...*<br>-    | -      | <p>Looping vocabulary element identifying each unique SGTIN, NTIN, or China Product Code for product master data embedded in the epc serial number in the Commissioning and Transformation events.<br/>SSCC codes not included in <b>VocabularyElement</b> product master data.</p> <div> <p><b>i</b> To conform with GS1 standards, master data attributes should be sent in the <b>VocabularyElement</b>. Each unique SGTIN, NTIN, or China Product Code embedded in Commissioning event epcList/epc serial numbers should be sent in one instance of <b>VocabularyElement</b>.</p> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  |  | @id                   | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies the product code for which master data is being sent in the <b>VocabularyElement</b> loop.<sup>2</sup><br/>VocabularyElement   @id = SGTIN, NTIN, or China Product Code with GS1-conformant urn or http prefix. These are the only values supported in this element. All other product identifier types will be sent as additional trade item types. SSCC codes are not identified in any part of the <b>VocabularyElement</b> group.</p> <p>Must match the product code embedded within the serial number in the epc code in one or more commissioning events.</p> <p>SGTIN (strongly recommended for GS1-conformance)</p> <ul style="list-style-type: none"> <li>Prefix: <code>urn:epc:idpat:sgtin:</code></li> <li>Example: <code>urn:epc:idpat:sgtin:0030001.0012345.*</code></li> </ul> <p>China</p> <ul style="list-style-type: none"> <li>Prefix: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/</code></li> <li>Example: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/10230.*</code></li> </ul> |
|              |  |  |  |  |  |  | attribute(1)          | 1...1<br>1/*  | String | <p><b>Conditionally required</b> if item master data attributes are sent in <b>VocabularyElement</b>. Instance 1 of attribute for packaging level value identified by @id attribute.<sup>3</sup><br/>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | @id                   | 1...1<br>0/*  | String | <p><b>Required.</b> Attribute identifying packaging level.<br/>Valid value: <code>http://epcis.tracelink.com/mda/packageTypeCode</code><sup>4</sup><br/>See the <a href="#">MDAttributes</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>urn:epcglobal:epcis:vtype:EPCClass<sup>2</sup>urn:epc:idpat:sgtin:0030001.0012345.\*<sup>3</sup>UN<sup>4</sup>http://epcis.tracelink.com/mda/packageTypeCode

| Data Element |  |  |  |  |  |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|--|--------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | attribute(2) | 0...1<br>0/*  | String | Instance 2 of attribute for internal material number in Pharmaceutical Manufacturer's internal system identified by @id attribute. Identified by the value in the next attribute element in the current loop = MANUFACTURER_PART_NUMBER. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code.<br>Valid value: urn:epcglobal:cbv:mda#additionalTradeItemIdentification <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  |  | attribute(3) | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute(2)   @id is populated. Instance 3 of attribute for internal material number identifier type for the product. Id attribute identifying internal material code.<br/>Valid value: MANUFACTURER_PART_NUMBER<sup>3</sup></p> <p>Sequence of fields for internal material number is:</p> <ol style="list-style-type: none"> <li>1. <code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;100335&lt;/attribute&gt;</code></li> <li>2. <code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;MANUFACTURER_PART_NUMBER&lt;/attribute&gt;</code></li> </ol> <div>  If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown. </div> |
|              |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code.<br>Valid value: urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | attribute(4) | 0...1<br>0/*  | String | Instance 4 of attribute for country drug code for all national drug code types, identified by the enum value in the next attribute element in the current loop and by the attribute @id value as an additional trade item. <sup>5</sup><br>Country drug code type defined by value in next attribute element where @id = urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode OR http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code.<br>Valid value: urn:epcglobal:cbv:mda#additionalTradeItemIdentification <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>100335<sup>2</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification<sup>3</sup>MANUFACTURER\_PART\_NUMBER<sup>4</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode<sup>5</sup>82025030221<sup>6</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification

| Data Element |  |  |  |  |  |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|--|--|--------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | attribute(5) | 0...10/*      | String | <p><b>Conditionally required</b> if the previous name/value pair attribute   <b>@id</b> is populated with the country drug code value. Instance 5 of attribute for Country drug code identifier type. Must follow attribute with country drug value. Id attribute identifying internal material code.<sup>1</sup></p> <p>Sequence of fields for country drug code is:</p> <p>GS1:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;FDA_NDC_11&lt;/attribute&gt;</code></li> </ol> <p>TraceLink:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode"&gt;US_NDC442&lt;/attribute&gt;</code></li> </ol> <div> <p>❗ If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown.</p> </div> <p>The following qualifiers have been defined by GS1 as additional trade item types:</p> <ul style="list-style-type: none"> <li><code>MANUFACTURER_PART_NUMBER</code> = Internal material number</li> <li><code>FDA_NDC_11</code> = US NDC542</li> <li><code>DIN</code> = Canada Drug ID Number</li> <li><code>PHARMACODE_CH</code> = Swiss Pharma Code</li> <li><code>NAN</code> = Nordic Article Number</li> </ul> <p>To identify these material number types, use attribute   <b>@id</b> string:<br/> <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode.</code></p> <p>For all other country drug code types, use <b>attribute</b>   <b>@id</b> string:<br/> <code>http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode.</code></p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p> |

<sup>1</sup>FDA\_NDC\_11

| Data Element |  |             |  |  |  |  |  |  |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|-------------|--|--|--|--|--|--|-----|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |             |  |  |  |  |  |  | @id | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code. Valid values: <sup>1</sup> <ul style="list-style-type: none"> <li><code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code> (GS1 enums).</li> <li><code>http://epcis.tracelink.com/mda/packageTypeCode</code> (TraceLink enums).</li> </ul>                                                                                                                                                                                           |
| EPCISBody    |  |             |  |  |  |  |  |  |     | 1...1<br>-    | -      | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  | EventList   |  |  |  |  |  |  |     | 1...1<br>-    | -      | <b>Required.</b> The <b>EventList</b> includes the following events: <ul style="list-style-type: none"> <li><b>ObjectEvent</b> (1 or more for commissioning)</li> <li><b>ObjectEvent</b> (0 or more for decommissioning)</li> <li><b>ObjectEvent</b> (0 or more for destroying)</li> <li><b>AggregationEvent</b> (0 or more for aggregation)</li> <li><b>ObjectEvent</b> (1 for product release)</li> <li>Transformation Event</li> </ul> <div> <i>i</i> The order of events is not enforced by the schema. </div> |
|              |  | choice%1    |  |  |  |  |  |  |     | 1...*<br>-    | -      | <b>Required.</b> Only one of the following choice options may be selected in any one loop on EPCISBody   <b>EventList</b> : <ul style="list-style-type: none"> <li><b>AggregationEvent</b></li> <li><b>ObjectEvent</b> (with commissioning extensions)</li> <li><b>ObjectEvent</b> (with decommissioning extensions)</li> <li><b>ObjectEvent</b> (with destroying extensions)</li> <li><b>ObjectEvent</b> (with product release extensions)</li> </ul>                                                             |
|              |  | ObjectEvent |  |  |  |  |  |  |     | 0...*<br>-    | -      | Choice 1 for <b>EventList</b> . Data = <b>ObjectEvent</b> for the Commissioning Events.<br><b>EventList</b> = <b>ObjectEvent</b> Commissioning when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <code>ADD</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:commissioning</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:active</code></li> </ul>                                                                                       |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|---------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in XML datetime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | recordTime          | 0...1<br>0/*  | dateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | epcList             | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format: <sup>3</sup><br>CN EDMC: <ul style="list-style-type: none"> <li>• <a href="http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;">http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;</a></li> <li>• Ex: <a href="http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943">http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943</a></li> </ul> SGTIN: <ul style="list-style-type: none"> <li>• <a href="urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;">urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</a></li> <li>• Ex: <a href="urn:epc:id:sgtin:068202.0401034.11220207026272">urn:epc:id:sgtin:068202.0401034.11220207026272</a></li> </ul> SSCC: <ul style="list-style-type: none"> <li>• <a href="urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;">urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</a></li> <li>• Ex: <a href="urn:epc:id:sscc:030944.10105363280">urn:epc:id:sscc:030944.10105363280</a></li> </ul> |
|              |  |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The <b>action</b> value must equal <b>ADD</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>bizStep</b> value must equal <a href="urn:epcglobal:cbv:bizstep:commissioning">urn:epcglobal:cbv:bizstep:commissioning</a> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>2016-10-01T22:08:02Z<sup>2</sup>-04:00<sup>3</sup><urn:epc:id:sgtin:088202.5503022.100000000670>, <urn:epc:id:sscc:088202.002000000034>, <http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943>, <http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002><sup>4</sup>ADD<sup>5</sup><urn:epcglobal:cbv:bizstep:commissioning>



| Data Element |  |  |                              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                   |
|--------------|--|--|------------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | disposition                  | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <code>urn:epcglobal:cbv:disp:active</code> . <sup>1</sup>                                                                                                                                                            |
|              |  |  | readPoint                    | 0...1<br>-    | -      | <p>The location where the commissioning event occurred.</p> <div> <i>i</i> To represent the facility where the commissioning event occurred, only use the SGLN representation. If no <b>subLocation</b>, third segment = 0. </div> <p>Optional for a commissioning event.</p> |
|              |  |  | id                           | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>2</sup><br>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                            |
|              |  |  | bizLocation                  | 1...1<br>-    | -      | <b>Required.</b> Mandatory for a commissioning event.                                                                                                                                                                                                                         |
|              |  |  | id                           | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>3</sup>                                                                                                                |
|              |  |  | extension                    | 0...1<br>-    | -      | Main extension body for commission event.                                                                                                                                                                                                                                     |
|              |  |  | ilmd                         | 0...1<br>-    | -      | Instance lot master data specific to product being commissioned.                                                                                                                                                                                                              |
|              |  |  | cbvmdata:lotNumber           | 0...1<br>0/*  | String | The lot or batch code for the serialized item in an alphanumeric string. <sup>4</sup>                                                                                                                                                                                         |
|              |  |  | cbvmdata:itemExpirationDate  | 0...1<br>0/*  | Date   | The expiration date for the serialized item, formatted in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                     |
|              |  |  | tl:commissionEventExtensions | 0...1<br>-    | -      | Extensions used for Commission <b>ObjectEvent</b> .                                                                                                                                                                                                                           |

<sup>1</sup>urn:epcglobal:cbv:disp:active<sup>2</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>3</sup>urn:epc:id:sgln:0614141.12345.1400<sup>4</sup>ABC123<sup>5</sup>2017-12-31

| Data Element |  |  |  |  |  |                     | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|--|---------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:filterValue      | 0...1<br>-    | Integer | <b>tl:filterValue</b> is used only if it is mandatory by a trade partner to convert SSCC to GS1 HEX or Tag URI format.<br>See the <a href="#">FilterValue</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:packagingLevel   | 0...1<br>0/*  | String  | <p>The packaging level of the commissioned item using the supported enumeration values.<sup>1</sup></p> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. homogenous pallet).</p> <p><b>w</b> If <b>packagingLevel</b> is missing from both the <b>VocabularyElement</b> and commissioning event extensions, an error will be thrown.</p> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | tl:epcAttributes    | 0...*<br>-    | -       | <p>Supports optional inclusion of human readable barcode content associated with each epc number in a commission event.</p> <p><b>i</b> Included only if provided in original commission event.</p>                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | @epc                | 1...1<br>1/*  | String  | <p><b>Required.</b> The EPC serial number to which the <b>tl:barcodeContent</b> is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5].<sup>2</sup></p> <ul style="list-style-type: none"> <li>Item: SGTIN</li> <li>Case: SGTIN or SSCC</li> <li>Pallet: SSCC</li> </ul>                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:barcodeContent   | 1...1<br>1/*  | String  | <b>Required.</b> The human readable barcode contents encoded in the 2D barcode WITH parentheses for the AI keys. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | tl:plantLocationId  | 0...1<br>0/*  | String  | Identifier of plant where products were commissioned. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:productionLineId | 0...1<br>1/*  | String  | Identifier of production line where products were commissioned. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>EA<sup>2</sup>urn:epc:id:sgtin:068202.0401034.11220207026272<sup>3</sup>(01)50682020401034(21)11220207026272(17)170731(10)A312101(7004)0120<sup>4</sup>0614141.12345.1400<sup>5</sup>PW003

| Data Element |  |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|-------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:lineManagerName      | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products. <sup>1</sup>                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  | tl:internalMaterialCode | 0...1<br>0/*  | String | Internal material number for the product in the Pharmaceutical Manufacturer's internal systems (e.g. ERP). <sup>2</sup><br><br><div> <i>i</i> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. homogeneous pallet). </div>                                                                              |
|              |  |  |  |  |  | tl:packagingItemCode    | 1...1<br>1/*  | String | The product code for the commissioned item (e.g. GTIN-14). <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | @type                   | 1...1<br>1/*  | String | <b>Conditionally required</b> if <b>tl:packagingItemCode</b> is populated. The product code type. Valid values: <sup>4</sup> <ul style="list-style-type: none"> <li>CN-RESCODE</li> <li>GTIN-14</li> <li>NTIN</li> </ul> See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                   |
|              |  |  |  |  |  | tl:countryDrugCode      | 0...1<br>0/*  | String | The national drug code for the commissioned item (e.g. NDC number for US products). <sup>5</sup><br><br><div> <i>i</i> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. homogeneous pallet). </div>                                                                                                     |
|              |  |  |  |  |  | @type                   | 0...1<br>0/*  | String | The national drug code type using the supported enumeration values and any formatting instructions provided. <sup>6</sup><br><br><div> <i>i</i> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. homogeneous pallet). </div> See the <a href="#">CountryDrugCode</a> enumeration list for valid values. |

<sup>1</sup>John Smith<sup>2</sup>100234<sup>3</sup>50300694220667<sup>4</sup>GTIN-14<sup>5</sup>0069-4220-66<sup>6</sup>US\_NDC442

| Data Element |  |  |  |  |  |                      | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|----------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:manufacturingDate | 0...1<br>0/10 | Date     | The date of manufacture for the serialized item, formatted in YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:extensionField    | 0...*<br>-    | -        | Customer extension point to pass in 1 or more name/value pairs containing additional data attributes not already supported in this message. If this element group is populated both <b>tl:fieldName</b> and <b>tl:fieldValue</b> must be populated. These extensions are not stored by TraceLink and are used only for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message, such as when a CMO is required to provide additional data fields to the brand owner. In this case, TraceLink would have a custom map for that trade partner to map these fields outbound. Different trade partners may have different field requirements and may therefore require that <b>tl:extensionField</b> be populated differently per trade partner. |
|              |  |  |  |  |  | tl:fieldName         | 1...1<br>1/*  | String   | <b>Conditionally required</b> if the <b>tl:extensionField</b> element group is populated. Populate with the field name provided by the trade partner that will be receiving the mapped outbound message. The field name must match the field name provided by the trade partner exactly, including case, so it is properly detected in the outbound mapping.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:fieldValue        | 1...1<br>1/*  | String   | <b>Conditionally required</b> if the <b>tl:extensionField</b> element group is populated. Populate with the field value content that corresponds to <b>tl:fieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | ObjectEvent          | 0...*<br>-    | -        | <b>ObjectEvent</b> describing decommissioning events.<br><b>EventList = ObjectEvent</b> Decommissioning when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <b>DELETE</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:decommissioning</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:inactive</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | eventTime            | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in XML datetime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | eventTimeZoneOffset  | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | epcList              | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet decommissioned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | epc                  | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format: <sup>4</sup><br>CN EDMC:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>2016-12-18<sup>2</sup>2017-01-30T08:30:21.32Z<sup>3</sup>-04:00<sup>4</sup>urn:epc:id:sgtin:068202.0401034.11220207026272, urn:epc:id:sscc:030944.10105363280, http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943

| Data Element |  |  |             |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|-------------|--|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |             |  |               |        | <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;">http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;</a></li> <li>Ex: <a href="http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943">http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943</a></li> </ul> <p>SGTIN:</p> <ul style="list-style-type: none"> <li><a href="urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;">urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</a></li> <li>Ex: <a href="urn:epc:id:sgtin:068202.0401034.11220207026272">urn:epc:id:sgtin:068202.0401034.11220207026272</a></li> </ul> <p>SSCC:</p> <ul style="list-style-type: none"> <li><a href="urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;">urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</a></li> <li>Ex: <a href="urn:epc:id:sscc:030944.10105363280">urn:epc:id:sscc:030944.10105363280</a></li> </ul> |
|              |  |  | action      |  | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must equal <b>DELETE</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | bizStep     |  | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must equal <a href="urn:epcglobal:cbv:bizstep:decommissioning">urn:epcglobal:cbv:bizstep:decommissioning</a> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | disposition |  | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <a href="urn:epcglobal:cbv:disp:inactive">urn:epcglobal:cbv:disp:inactive</a> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | readPoint   |  | 1...1<br>-    | -      | <b>Required.</b> Location where event occurred. Defined with GS1-conformant party identifier types with full urn or http prefix. SGLN is strongly preferred but other party types supported as well. Links to location party address data if present in VocabularyElement   @id. If does not link to location identifier in VocabularyElement   @id, <b>readPoint</b> used for master data lookup.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | id          |  | 1...1<br>0/*  | AnyURI | <b>Required.</b> This location identifier links to the VocabularyElement   @id if the location address info is populated in the <b>EPCISMasterData</b> header extension. If the location address is not present in <b>VocabularyElement</b> , the TraceLink system uses this identifier for master data lookup. <sup>4</sup><br>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | bizLocation |  | 1...1<br>-    | -      | The location where the event occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | id          |  | 1...1         | AnyURI | The SGLN EPC of the location of where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>DELETE<sup>2</sup><urn:epcglobal:cbv:bizstep:decommissioning><sup>3</sup><urn:epcglobal:cbv:disp:inactive><sup>4</sup><urn:epc:id:sgln:0614141.12345.1400>

| Data Element |  |  |  |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |               |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | 0...1<br>-    | -      | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Business transaction list group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | 1...*<br>0/*  | AnyURI | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . The transaction identifier associated with the released product. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  | 1...1<br>1/*  | String | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul> <div>  If at least one Target Market in Product Master Data = <b>RU</b>, one instance of bizTransaction   <b>@type</b> with a value of <a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a> must be present.           </div> |
|              |  |  |  |  | 0...1<br>0/*  | Date   | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | 0...1<br>-    | String | Serialized Operations Manager External Partner Location identifier. Type of identifier defined by <b>@type</b> enum below. <sup>3</sup><br>When transactions are submitted by an external Serialized Operations Manager Partner, the system uses the subscriber company integration user to perform the action and log this in the audit trail so that all transactions executed by the external Serialized Operations Manager Partner are attributed to that company.                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | 1...1<br>1/*  | String | <b>Conditionally required</b> if <b>locationId</b> is populated. Attribute identifies the location types. See the <a href="#">LocationIdType</a> enumeration list for valid values. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | 0...1<br>-    | -      | Extensions used for <b>ObjectEvent</b> Decommissioning.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | 0...1<br>0/*  | Date   | Date associated with the business transaction document in <b>bizTransactionList</b> in XML date format YYYY-MM-DD. This date may or may not be the same as the <b>eventTime</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016<sup>2</sup>2019-04-01<sup>3</sup>8888882028677<sup>4</sup>GLN<sup>5</sup>2017-01-31

| Data Element |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|---------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:disaggregateFromParent | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs back end to disaggregate a serial number from its parent container (if it is aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> . <sup>1</sup> If not set, or set to <b>false</b> , the back end operates in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container. If source is not populated, target defaults to <b>false</b> . |
|              |  |  |  | tl:marketCountryCode      | 0...1<br>0/2  | String  | Market country code. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | tl:businessPartyInfo      | 0...1<br>-    | -       | The address of the authorizing party for the decommissioning event. The <b>readPoint</b> contains the location.                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | tl:businessId             | 0...*<br>0/*  | String  | The identifier associated with the authorizing party.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | @type                     | 0...1<br>0/*  | String  | The type of the <b>BusinessId</b> identifier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:businessClassification | 0...1<br>0/*  | String  | The classification of the business.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -       | Business name and address of the authorizing business entity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:businessName           | 1...1<br>0/*  | String  | <b>Required.</b> Business name of the entity that is authorizing the decommission of the serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:street1                | 1...1<br>0/*  | String  | <b>Required.</b> First line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:street2                | 0...1<br>0/*  | String  | Second line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:city                   | 1...1<br>0/*  | String  | <b>Required.</b> City for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:village                | 0...1<br>0/*  | String  | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:houseNumber            | 0...1         | String  | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China.                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>false<sup>2</sup>US



| Data Element |  |  |  |  |  |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                        |               |        | For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> .                                                                                                                                                                               |
|              |  |  |  |  |  | tl:township            | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:district            | 0...1<br>0/*  | String | District code.<br><br> Must be a 3-digit numeric code.                                                                                                                                                        |
|              |  |  |  |  |  | tl:stateOrRegion       | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region of the business entity indicated in the <b>businessName</b> field, using the standard two-letter abbreviation specified in the ISO 3166-2:1998 country subdivision code.                                                                       |
|              |  |  |  |  |  | tl:postalCode          | 0...1<br>1/*  | String | Postal code for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:country             | 1...1<br>0/*  | String | <b>Required.</b> The country where the company indicated in the <b>businessName</b> field is located. The country uses the standard two-letter abbreviation specified in the ISO 3166-1alpha-2:1997 country code.<br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  |  | tl:corporateFax        | 0...1<br>1/*  | String | Company fax number.                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:addressObjectGUID   | 0...1<br>0/36 | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <sup>1</sup><br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F                               |
|              |  |  |  |  |  | tl:houseGUID           | 0...1<br>0/36 | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS). <sup>2</sup><br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F                       |
|              |  |  |  |  |  | tl:taxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                         |
|              |  |  |  |  |  | tl:premisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                          |

<sup>1</sup>19406454-0022-000C-00B0-000000000152<sup>2</sup>986f2934-be05-438f-A30E-c15b90e15dbc

| Data Element |  |  |             |                           | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|-------------|---------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |             | tl:warehouseOperatorName  | 0...1<br>0/*  | String   | Name of the person responsible for warehouse operations. <sup>1</sup>                                                                                                                                                                                                                                                                                    |
|              |  |  |             | tl:decommissionReasonCode | 0...1<br>0/*  | String   | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Reason code for decommissioning. <sup>2</sup> See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                                                                         |
|              |  |  |             | tl:reasonDescription      | 0...1<br>0/*  | String   | Description for decommission reason code. <sup>3</sup>                                                                                                                                                                                                                                                                                                   |
|              |  |  |             | tl:destructionMethod      | 0...1<br>0/*  | String   | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Method of destruction. <sup>4</sup> See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                                                                                        |
|              |  |  | ObjectEvent |                           | 0...*<br>-    | -        | <b>ObjectEvent</b> recording destroying events.<br><b>EventList = ObjectEvent</b> Destroy when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <b>DELETE</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:destroying</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:destroyed</b></li> </ul> |
|              |  |  |             | eventTime                 | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in XML datetime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>5</sup>                                                                                                                                             |
|              |  |  |             | eventTimeZoneOffset       | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>6</sup>                                                                                                                                                      |
|              |  |  |             | epcList                   | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                                                                                                                                                                                                                |
|              |  |  |             | epc                       | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format: <sup>7</sup><br>CN EDMC: <ul style="list-style-type: none"> <li><b>http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;</b></li> <li>Ex: <b>http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943</b></li> </ul>                                                |

<sup>1</sup>John Smith<sup>2</sup>PRODUCTION\_DEFECT<sup>3</sup>Defect from production<sup>4</sup>LIQUID\_DILUTION\_DRAINAGE<sup>5</sup>2017-01-30T08:30:21.32Z<sup>6</sup>-04:00<sup>7</sup>urn:epc:id:sgtin:068202.0401034.11220207026272, urn:epc:id:sscc:030944.10105363280, http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943

| Data Element |  |  |  |             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|-------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |             |               |        | SGTIN: <ul style="list-style-type: none"> <li><code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>Ex: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> SSCC: <ul style="list-style-type: none"> <li><code>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</code></li> <li>Ex: <code>urn:epc:id:sscc:030944.10105363280</code></li> </ul> |
|              |  |  |  | action      | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must equal <code>DELETE</code> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | bizStep     | 0...1<br>0/*  | AnyURI | The <b>bizStep</b> value must equal <code>urn:epcglobal:cbv:bizstep:destroying</code> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | disposition | 0...1<br>0/*  | AnyURI | The <b>disposition</b> value must equal <code>urn:epcglobal:cbv:disp:destroyed</code> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | readPoint   | 1...1<br>-    | -      | <b>Required.</b> Location where event occurred. Defined with GS1-conformant party identifier types with full urn or http prefix. SGLN is strongly preferred but other party types supported. Links to location party address data if present in VocabularyElement   <b>@id</b> . If does not link to location identifier in VocabularyElement   <b>@id</b> , <b>readPoint</b> used for master data lookup.                                                             |
|              |  |  |  | id          | 1...1<br>0/*  | AnyURI | <b>Required.</b> The party identifier of the location where the decommissioning event occurred. SGLN is strongly preferred for GS1 conformance. This may be a site-level SGLN, or a finer-grain location identifier. <sup>4</sup> GS1-conformant supported prefixes are listed in <a href="#">MDPartyTypeAttributes</a> lookup. See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                                                       |
|              |  |  |  | bizLocation | 0...1<br>-    | -      | The location where the event occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | id          | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup>                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>DELETE<sup>2</sup>`urn:epcglobal:cbv:bizstep:decommissioning`<sup>3</sup>`urn:epcglobal:cbv:disp:inactive`<sup>4</sup>`urn:epc:id:sgln:0614141.12345.1400`<sup>5</sup>`urn:epc:id:sgln:0614141.12345.1400`

| Data Element |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | bizTransactionList        | 0...1<br>-    | -      | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Business transaction list group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | bizTransaction            | 1...*<br>0/*  | AnyURI | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . The transaction identifier associated with the destroyed product. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul> <div>  If at least one Target Market in Product Master Data = <b>RU</b>, one instance of bizTransaction   @type with a value of <a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a> must be present.           </div> |
|              |  |  | @date                     | 0...1<br>0/*  | Date   | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | tl:locationId             | 0...1<br>-    | String | Serialized Operations Manager External Partner Location identifier. Type of identifier defined by enum below. When messages are submitted by an external Serialized Operations Manager Partner, the system uses the partner company integration user to perform the action. This is logged in the audit trail so that all messages executed by the external Serialized Operations Manager Partner are attributed to that company. <sup>3</sup>                                                                                                                                                                                                                                                                                                                            |
|              |  |  | @type                     | 1...1<br>1/*  | String | <b>Conditionally required</b> if <b>tl:locationId</b> is populated. Attribute identifies the location types. <sup>4</sup> See the <a href="#">MessagePartyIDType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | tl:destroyEventExtensions | 0...1<br>-    | -      | Extensions used for <b>ObjectEvent</b> Destroying.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | tl:transactionDate        | 0...1<br>0/*  | Date   | Date associated with the business transaction document in <b>bizTransactionList</b> in XML date format YYYY-MM-DD. This date may or may not be the same as the <b>eventTime</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016<sup>2</sup>2019-04-01<sup>3</sup>8888882028677<sup>4</sup>GLN<sup>5</sup>2017-02-18

| Data Element |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|---------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:disaggregateFromParent | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs back end to disaggregate a serial number from its parent container (if it is aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> . <sup>1</sup> If not set, or set to <b>false</b> , the back end operates in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container. If source is not populated, target defaults to <b>false</b> . |
|              |  |  |  | tl:marketCountryCode      | 0...1<br>0/2  | String  | Market country code. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | tl:businessPartyInfo      | 0...1<br>0/*  | -       | Authorizing party information for the destroying event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:businessId             | 1...*<br>0/*  | String  | <b>Required.</b> Identifier associated with the authorizing business entity.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | @type                     | 1...1<br>0/*  | String  | <b>Required.</b> The business identifier type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:businessClassification | 0...1<br>0/*  | String  | The classification of the business.<br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -       | Business name and address of the authorizing business entity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:businessName           | 1...1<br>0/*  | String  | <b>Required.</b> Business name of the entity that is authorizing the destruction of the serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:street1                | 1...1<br>0/*  | String  | <b>Required.</b> First line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:street2                | 0...1<br>0/*  | String  | Second line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:city                   | 1...1<br>0/*  | String  | <b>Required.</b> City for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:village                | 0...1<br>0/*  | String  | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:houseNumber            | 0...1         | String  | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China.                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>false<sup>2</sup>US

| Data Element |  |  |  |  |  |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                        |               |        | For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> .                                                                                                                                                                               |
|              |  |  |  |  |  | tl:township            | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:district            | 0...1<br>0/*  | String | District code.<br><br> Must be a 3-digit numeric code.                                                                                                                                                        |
|              |  |  |  |  |  | tl:stateOrRegion       | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region of the business entity indicated in the <b>businessName</b> field, using the standard two-letter abbreviation specified in the ISO 3166-2:1998 country subdivision code.                                                                       |
|              |  |  |  |  |  | tl:postalCode          | 0...1<br>1/*  | String | Postal code for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:country             | 1...1<br>0/*  | String | <b>Required.</b> The country where the company indicated in the <b>businessName</b> field is located. The country uses the standard two-letter abbreviation specified in the ISO 3166-1alpha-2:1997 country code.<br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  |  | tl:corporateFax        | 0...1<br>1/*  | String | Company fax number.                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:addressObjectGUID   | 0...1<br>0/36 | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <sup>1</sup><br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F                               |
|              |  |  |  |  |  | tl:houseGUID           | 0...1<br>0/36 | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS). <sup>2</sup><br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F                       |
|              |  |  |  |  |  | tl:taxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                         |
|              |  |  |  |  |  | tl:premisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                          |

<sup>1</sup>19406454-0022-000C-00B0-000000000152<sup>2</sup>986f2934-be05-438f-A30E-c15b90e15dbc

| Data Element |  |  |                  |                           | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|------------------|---------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                  | tl:warehouseOperatorName  | 0...1<br>0/*  | String   | Name of the person responsible for warehouse operations. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                  | tl:decommissionReasonCode | 0...1<br>0/*  | String   | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Reason code for decommissioning. <sup>2</sup> See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |                  | tl:reasonDescription      | 0...1<br>0/*  | String   | Description for destroy reason code. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |                  | tl:destructionMethod      | 0...1<br>0/*  | String   | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> . Method of destruction. <sup>4</sup> See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | AggregationEvent |                           | 0...*<br>-    | -        | <b>AggregationEvent</b> is option 2 for the <b>EventList</b> choice for the Aggregation events.<br><b>EventList = AggregationEvent</b> when all of the following is true: <ul style="list-style-type: none"> <li>• <b>action</b> = <b>ADD</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:packing</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul>                                                                                                                                                                                                  |
|              |  |  |                  | eventTime                 | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in XML datetime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |                  | eventTimeZoneOffset       | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |                  | parentID                  | 1...1<br>1/*  | AnyURI   | <b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format (e.g. f for an item-to-case aggregation, the EPC of the case. For a case-to-pallet aggregation, the EPC of the pallet). <sup>7</sup><br>CN EDMC: <ul style="list-style-type: none"> <li>• <a href="http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;">http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;</a></li> <li>• Ex: <a href="http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943">http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943</a></li> </ul> SGTIN: |

<sup>1</sup>John Smith<sup>2</sup>PRODUCTION\_DEFECT<sup>3</sup>Defect from production<sup>4</sup>LIQUID\_DILUTION\_DRAINAGE<sup>5</sup>2013-10-01T22:10:02Z<sup>6</sup>-04:00<sup>7</sup>urn:epc:id:sgtin:088202.5503022.100000000670, urn:epc:id:sscc:088202.002000000034, <http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943>,<http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002>

| Data Element |  |  |           |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|-----------|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |           |  |               |        | <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>• Ex: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> <p>SSCC:</p> <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</code></li> <li>• Ex: <code>urn:epc:id:sscc:030944.10105363280</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | childEPCs |  | 1...1<br>-    | -      | <b>Required.</b> List of identifiers of the child items in the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPCs of the items; for a case-to-pallet aggregation, the EPCs of the cases).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | epc       |  | 1...*<br>1/*  | String | <p><b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parentheses for the AI keys. Non-GS1 serial numbers (e.g. China) are expressed in native format. See <a href="#">EPC Pure Identifier Format Examples</a>. Identifier of the child items in the parent container in EPC Pure Identity URI format.<sup>1</sup></p> <p>CN EDMC:</p> <ul style="list-style-type: none"> <li>• <code>http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;</code></li> <li>• Ex: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/88102321100002005943</code></li> </ul> <p>SGTIN:</p> <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>• Ex: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> <p>SSCC:</p> <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</code></li> <li>• Ex: <code>urn:epc:id:sscc:030944.10105363280</code></li> </ul> |
|              |  |  | action    |  | 1...1<br>1/*  | String | <b>Required.</b> The <b>action</b> value must equal <b>ADD</b> for the aggregation event. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | bizStep   |  | 0...1<br>0/*  | AnyURI | The <b>bizStep</b> value must equal <code>urn:epcglobal:cbv:bizstep:packing</code> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup>`urn:epc:id:sgtin:088202.5503022.100000000670`, `urn:epc:id:sscc:088202.002000000034`, `http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943`,  
`http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002`

<sup>2</sup>ADD

<sup>3</sup>`urn:epcglobal:cbv:bizstep:packing`



| Data Element |  |  |                               | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|-------------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | disposition                   | 0...1<br>0/*  | AnyURI  | The <b>disposition</b> value must equal <code>urn:epcglobal:cbv:disp:in_progress</code> . <sup>1</sup>                                                                                                                                                                                                                           |
|              |  |  | readPoint                     | 0...1<br>-    | -       | <p>Location where the event occurred.</p> <p> To represent the facility where the commissioning event occurred, only use the SGLN representation. If no <b>subLocation</b>, third segment = 0.</p> <p>Optional for <b>AggregationEvent</b>.</p> |
|              |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location of where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>2</sup>                                                                                                                                                                     |
|              |  |  | bizLocation                   | 0...1<br>-    | -       | <b>Required.</b> The location where the event occurred.                                                                                                                                                                                                                                                                          |
|              |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>3</sup>                                                                                                                                                                   |
|              |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -       | Extensions used for Aggregation Event.                                                                                                                                                                                                                                                                                           |
|              |  |  | tl:packedStatus               | 0...1<br>0/*  | String  | <p>The packout of the item or container using the supported enumeration values.<sup>4</sup></p> <p>See the <a href="#">PackedStatus</a> enumeration list for valid values.</p>                                                                                                                                                   |
|              |  |  | tl:quantity                   | 0...1<br>-    | Integer | The quantity of child serial numbers aggregated to the parent container in this aggregation. <sup>5</sup>                                                                                                                                                                                                                        |
|              |  |  | tl:resetContainerAggregation  | 0...1<br>-    | Boolean | Reset container aggregation flag. <sup>6</sup>                                                                                                                                                                                                                                                                                   |
|              |  |  | ObjectEvent                   | 1...1<br>-    | -       | <p><b>Required.EventList.</b> Data = <b>ObjectEvent</b> for Product Release Events.</p> <p><b>EventList = ObjectEvent</b> Product Release when all of the following is true:</p>                                                                                                                                                 |

<sup>1</sup>urn:epcglobal:cbv:disp:in\_progress<sup>2</sup>urn:epc:id:sgln:1100001.12345.0<sup>3</sup>urn:epc:id:sgln:1100001.12345.0<sup>4</sup>FULL<sup>5</sup>48<sup>6</sup>false

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|---------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |          | <ul style="list-style-type: none"> <li><b>action</b> = <code>OBSERVE</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:releasing</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:released</code></li> </ul>                              |
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in XML datetime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>1</sup>                                                              |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                       |
|              |  |  | epcList             | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of top-most containers (e.g. pallets, cases) in the shipment.                                                                                                                                                                           |
|              |  |  | epc                 | 1...<br>1/*   | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. Will not be populated or processed for product release event.                                                                                                                                        |
|              |  |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The <b>action</b> value must equal <code>OBSERVE</code> . <sup>3</sup>                                                                                                                                                                                   |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>bizStep</b> value must equal <code>http://epcis.tracelink.com/bizstep/releasing</code> . <sup>4</sup>                                                                                                                                             |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>disposition</b> value must equal <code>http://epcis.tracelink.com/disp/released</code> . <sup>5</sup>                                                                                                                                             |
|              |  |  | readPoint           | 0...1<br>-    | -        | <b>Required.</b> Refers to the location of where the commissioning event occurred.<br><div> <i>ⓘ</i> To represent the facility where the commissioning event occurred, only use the SGLN representation. If no <b>subLocation</b>, third segment = <code>0</code>. </div> |
|              |  |  | id                  | 1...1<br>0/*  | AnyURI   | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>6</sup><br>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                        |

<sup>1</sup>2013-10-01T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>OBSERVE<sup>4</sup>urn:epcglobal:cbv:bizstep:releasing<sup>5</sup>urn:epcglobal:cbv:disp:released<sup>6</sup>urn:epc:id:sgln:0614141.12345.RP1

| Data Element |  |  |  |                                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|----------------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizTransactionList               | 0...1<br>-    | -      | Business transaction list group.<br><br><div>  If populated, <b>tl:qualityControlEntityId</b> must also be populated. </div>                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | bizTransaction                   | 1...*<br>0/*  | AnyURI | The transaction identifier associated with the released product. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | @type                            | 1...1<br>1/*  | String | <b>Required.</b> The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/certificateconformity">http://epcis.tracelink.com/hc/btt/certificateconformity</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/civilcirculation">http://epcis.tracelink.com/hc/btt/civilcirculation</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/declarationconformity">http://epcis.tracelink.com/hc/btt/declarationconformity</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/stateconfirmation">http://epcis.tracelink.com/hc/btt/stateconfirmation</a></li> </ul> |
|              |  |  |  | @date                            | 0...1<br>0/*  | Date   | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> and the lot was commissioned in Russia. Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | extension                        | 0...1<br>-    | -      | Main extension body for commission event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | ilmd                             | 1...1<br>-    | -      | <b>Required.</b> Instance lot master data specific to product being commissioned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | cbvmdata:lotNumber               | 1...1<br>0/*  | String | <b>Required.</b> The lot number associated with the <b>InternalMaterialCode</b> or <b>CountryDrugCode</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:commissionEventExtensions     | 0...1<br>-    | -      | Extensions used for Commission <b>ObjectEvent</b> . Not populated in product release event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | tl:productReleaseEventExtensions | 1...1<br>-    | -      | Extensions used for TraceLink Product Release event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | choice%1                         | 1...1<br>-    | -      | <b>Required.</b> Only one of the following choice options must be selected: <ul style="list-style-type: none"> <li><b>internalMaterialCode</b></li> <li><b>countryDrugCode</b> and <b>@type</b> attribute</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016<sup>2</sup>2019-04-01<sup>3</sup>A12345

| Data Element |  |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|---------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                           |               |        | An error will be thrown if neither of the two fields are populated. An error will also be thrown if both of the two option fields are populated.                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:internalMaterialCode   | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>tl:countryDrugCode</b> is not populated. The internal material number configured in Product Master Data associated with the serialized items that are updated with the Product Release status. Specifying an internal material number will update all serial numbers at all packaging levels (e.g. item, case) that are linked to the internal material number and specified lot number. <sup>1</sup> |
|              |  |  |  |  |  | tl:countryDrugCode        | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>tl:internalMaterialCode</b> is not populated. The national drug code (e.g. NDC, Swissmedic, PZN, etc.) associated with the serialized items that will be updated with the Product Release status. Specifying a country drug code will update all serial numbers at all packaging levels (e.g. item, case) that are linked to the country drug code and specified lot number.                          |
|              |  |  |  |  |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b> The national drug code type using the supported enumeration values and any formatting instructions provided. See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:qualityControlEntityId | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>tl:bizTransactionList</b> in the <b>ObjectEvent</b> for Product Release Events is populated, or at least one Target Market in Product Master Data = <b>RU</b> and the lot was commissioned outside of Russia. Business or location identifier for the entity responsible for quality control. <sup>2</sup>                                                                                            |
|              |  |  |  |  |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b> Business or location type of the quality control entity identifier. <sup>3</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | tl:productionQty          | 0...*<br>-    | -      | Production quantity element group.                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | choice1                   | 1...1<br>-    | Choice | <b>Required.</b> Choice element of either <b>tl:packagingItemCode</b> or <b>tl:companyPrefix</b> .                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | tl:packagingItemCode      | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>tl:companyPrefix</b> is not populated. Option 1 for <b>choice1</b> . Identifies the product using the packaging level item code configured in Product Master Data. <sup>4</sup>                                                                                                                                                                                                                       |
|              |  |  |  |  |  | @type                     | 0...1<br>0/*  | String | <b>Required.</b> Packaging item code type. <sup>5</sup> See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>100234<sup>2</sup>0882028677010<sup>3</sup>GLN<sup>4</sup>50300694220667<sup>5</sup>GTIN-14

| Data Element |  |  |  |  |                     |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|---------------------|---------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                     | tl:companyPrefix    | 0...1<br>0/*  | String   | <b>Conditionally required</b> if <b>tl:packagingItemCode</b> is not populated. Option 2 for <b>choice1</b> . Identifies the company prefix assigned by GS1 for the released product. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |                     | tl:packagingLevel   | 1...1<br>1/*  | String   | <b>Required.</b> The packaging level of the commissioned item. <sup>2</sup><br>See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |                     | tl:quantityReported | 1...1<br>-    | Integer  | <b>Required.</b> Reported quantity of the released product. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  | extension           |                     | 0...1<br>-    | -        | EPCIS body event extension point. Contains the <b>TransformationEvent</b> . <b>TransformationEvent</b> is option 3 in the <b>EventList</b> choice. This extension can appear before or after commissioning event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | TransformationEvent |                     | 0...1<br>-    | -        | <p>Use the <b>TransformationEvent</b> to commission repackaged products. It is similar to the <b>CommissioningEvent</b>, but includes source products as input, and the commissioned serial numbers are the output repackaged products. The standard ilmd (instance level master data) captures product attributes, lot, and expiry like in a standard commission event.</p> <p>The <b>TransformationEvent</b> parameters are the same as the <b>CommissioningEvent</b> except there is no action:</p> <ul style="list-style-type: none"> <li>• <b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:commissioning</code> (optional).</li> <li>• <b>disposition</b> = <code>urn:epcglobal:cbv:disp:active</code> (optional).</li> </ul> <div>  The source and repackaged products can only be primaries or eaches. Cases and innerpacks not permitted. </div> |
|              |  |  |  |  | eventTime           |                     | 1...1<br>1/*  | DateTime | <b>Required.</b> The date/time when the disposition assigned occurs with a time zone indicator as specified in Section 9.5 of (EPCIS1.0.1) in XML datetime format : YYYY-MM-DDTHH:MM:SS.mmZ. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | recordTime          |                     | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | eventTimeZoneOffset |                     | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in effect at time and place where the disposition assigned occurred, consistent with what choice was made for eventTime. Per Section 7.2.8 of [EPCIS1.0.1]. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | inputEPCList        |                     | 0...1<br>-    | -        | <b>Conditionally required</b> if <b>inputQuantityList</b> is missing. The input EPC is the serial number of the source product that is transformed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>503006<sup>2</sup>EA<sup>3</sup>100<sup>4</sup>2017-03-29T22:10:02.31Z<sup>5</sup>-04:00

| Data Element |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|-------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                   |               |        | <p> Only primaries or eaches are allowed in Transformation Event EPC lists.</p> <p> One of either <b>inputEPCList</b> or <b>inputQuantityList</b> is mandatory. If both groups are missing, an error will be thrown. Both groups can be present.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | epc               | 0...*<br>1/*  | String | <p><b>Required.</b> The EPC identifier in EPC Pure Identity URI format. Only SGTIN and NTIN supported as Transformation input.<sup>1</sup><br/>SGTIN:</p> <ul style="list-style-type: none"> <li>Format: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>Example: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | inputQuantityList | 0...1<br>-    | -      | <p><b>Conditionally required</b> if <b>inputEPCList</b> is missing. Specifies non-serialized source products with packaging product code, lot number, and quantity.</p> <ul style="list-style-type: none"> <li>For GTIN-based source product, GTIN + Lot is expressed as:<br/><code>urn:epc:class:lgtn:030000.0000001.L12345</code></li> <li>For NTIN-based source product, NTIN + Lot is expressed as:<br/><code>http://epcis.tracelink.com/hc/lntin/class/4150.001647778.L12345</code></li> </ul> <p> The source products can only reference GTINs and NTINs for primaries or eaches. Cases and innerpacks not permitted.</p> <p> One of either <b>inputEPCList</b> or <b>inputQuantityList</b> is mandatory. If both groups are missing, an error will be thrown. Both groups may be present.</p> |
|              |  |  |  | quantityElement   | 1...*<br>-    | -      | <p><b>Required.</b> Identifies a quantity of source products that are identified by a specific class-level 940 identifier in urn format.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | epcClass          | 1...1<br>1/*  | String | <p><b>Required.</b> A class-level identifier for the source product in the <b>inputQuantityList</b> for which the quantity is provided.<sup>2</sup><br/>Format: <code>urn:epc:idpat:ObjectIdentifierType:CompanyPrefix.ItemRefAndIndicator.*</code></p> <ul style="list-style-type: none"> <li>For GTIN-based source product, GTIN + Lot is expressed as:</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>urn:epc:id:sgtin:030000.0000001.100000001020 http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002

<sup>2</sup>urn:epc:class:lgtn:030000.0000001.L12345

| Data Element |  |  |  |  |                  |  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|------------------|--|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                  |  |               |         | <code>urn:epc:class:lgtn:030000.0000001.L12345</code> <ul style="list-style-type: none"> <li>For NTIN-based source product, NTIN + Lot is expressed as:<br/> <code>http://epcis.tracelink.com/hc/lntin/class/4150.001647778.L12345</code> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  | quantity         |  | 1...1<br>-    | Integer | <b>Required.</b> A number that specifies how many or how much of the specified <b>epcClass</b> is denoted by this <b>quantityElement</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | uom              |  | 0...1<br>0/*  | String  | Unit of measure for the <b>epcClass</b> quantity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | outputEPCList    |  | 1...1<br>-    | -       | <b>Required.</b> Provides the epc serial number for the transformed product. <b>outputEPCList</b> is mandatory if Transformation Event is populated. <div> <i>i</i> Only primaries or eaches are allowed in Transformation Event EPC lists. </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | epc              |  | 1...*<br>1/*  | String  | <b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identifier URI format as specified in Section 6 of [TDS1.5]. <sup>2</sup><br>CN EDMC: <ul style="list-style-type: none"> <li>Format: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;</code></li> <li>Example: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943</code></li> </ul> SGTIN: <ul style="list-style-type: none"> <li>Format: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>Example: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> SSCC: <ul style="list-style-type: none"> <li>Format: <code>http://epcis.tracelink.com/hc/ntin/obj/&lt;company prefix&gt;.&lt;item reference&gt;.&lt;serial number&gt;</code></li> <li>Example: <code>http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002</code></li> </ul> |
|              |  |  |  |  | transformationID |  | 0...1<br>0/*  | AnyURI  | An identifier that links this event to other Transformation Events using an identical <b>transformationID</b> value. When specified, all inputs to all events sharing the same value of the <b>transformationID</b> may contribute to all outputs of all events sharing that value of <b>transformationID</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>0<sup>2</sup>`urn:epc:id:sgtin:088202.5503022.100000000670 urn:epc:id:sscc:088202.002000000034 http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943``http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002`

| Data Element |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                    |
|--------------|--|--|--|------------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizStep                      | 0...1<br>0/*  | AnyURI  | The <b>bizStep</b> value must be set to <code>urn:epcglobal:cbv:bizstep:commissioning</code> . <sup>1</sup>                                                                                                                                    |
|              |  |  |  | disposition                  | 0...1<br>0/*  | AnyURI  | The <b>disposition</b> value must be set to <code>urn:epcglobal:cbv:disp:active</code> . <sup>2</sup>                                                                                                                                          |
|              |  |  |  | readPoint                    | 0...1<br>-    | -       | Not used in Transformation Event.                                                                                                                                                                                                              |
|              |  |  |  | id                           | 0...1<br>0/*  | AnyURI  | Not used in Transformation Event. <sup>3</sup>                                                                                                                                                                                                 |
|              |  |  |  | bizLocation                  | 1...1<br>-    | -       | <b>Required.</b> Refers to the location of the product after the Transformation Event has occurred.                                                                                                                                            |
|              |  |  |  | id                           | 1...1<br>1/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the commissioning occurred. This may be a site-level SGLN or a finer-grain location identifier. <sup>4</sup>                                                                          |
|              |  |  |  | bizTransactionList           | 0...*<br>1/*  | String  | An unordered list of 0 or more business transactions that define the context of this event.                                                                                                                                                    |
|              |  |  |  | ilmd                         | 0...1<br>-    | -       | Instance lot master data specific to product being commissioned.                                                                                                                                                                               |
|              |  |  |  | cbvmdata:lotNumber           | 0...1<br>1/*  | String  | <b>Required.</b> The lot number associated with the <b>tl:internalMaterialCode</b> , <b>tl:packagingItemCode</b> , or <b>tl:countryDrugCode</b> specified above that is used to identify the serial numbers that will be updated. <sup>5</sup> |
|              |  |  |  | cbvmdata:itemExpirationDate  | 0...1<br>0/*  | Date    | The expiration date for the serialized item in YYYY-MM-DD format. <sup>6</sup>                                                                                                                                                                 |
|              |  |  |  | tl:commissionEventExtensions | 0...1<br>-    | -       | <b>Required.</b> Extensions used for Commission <b>ObjectEvent</b> .                                                                                                                                                                           |
|              |  |  |  | tl:filterValue               | 0...1<br>-    | Integer | Not used.                                                                                                                                                                                                                                      |

<sup>1</sup>urn:epcglobal:cbv:bizstep:commissioning<sup>2</sup>urn:epcglobal:cbv:disp:active<sup>3</sup>urn:epc:id:sgln:7777776.67345.0<sup>4</sup>urn:epc:id:sgln:7777776.67345.0<sup>5</sup>L120012<sup>6</sup>2019-12-31



| Data Element |  |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|-------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:packagingLevel       | 1...1<br>0/*  | String | <p><b>Conditionally required</b> for GS1 EPCIS conformance. The packaging level of the commissioned item using the supported enumeration values.<br/>Valid value: <b>EA</b> = Each<sup>1</sup></p> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> |
|              |  |  |  |  |  | tl:epcAttributes        | 0...*<br>-    | -      | Supports optional inclusion of human readable barcode content associated with each epc number in a commission event. Only included if provided in original commission event.                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | @epc                    | 1...1<br>1/*  | String | The EPC serial number to which the <b>tl:barcodeContent</b> is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5].<br>Valid value: <b>SGTIN</b> <sup>2</sup>                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:barcodeContent       | 1...1<br>0/*  | String | The human readable barcode contents encoded in the 2D barcode with parenthesis for the AI keys. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | tl:plantLocationId      | 0...1<br>0/*  | String | Identifier of plant where products are commissioned. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:productionLineId     | 0...1<br>1/*  | String | Identifier of production line where products are commissioned. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | tl:lineManagerName      | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  | tl:companyPrefix        | 0...1<br>0/*  | String | The GS1 Company Prefix.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | tl:internalMaterialCode | 0...1<br>0/*  | String | <b>Conditionally required</b> for GS1 EPCIS conformance. Internal material number for the product in the Pharmaceutical Manufacturer's internal systems (e.g. ERP). <sup>7</sup>                                                                                                                                                                                                                                                                               |

<sup>1</sup>EA<sup>2</sup>urn:epc:id:sgtin:088202.0503022.100000001020<sup>3</sup>(01)00882025030223(21)100000001020(17)190331(10)L120012<sup>4</sup>M0034<sup>5</sup>L009<sup>6</sup>John Smith<sup>7</sup>11002541210

| Data Element |  |  |  |  |  |                      | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|--|----------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                      |               |        | <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p>                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:packagingItemCode | 0...1<br>0/*  | String | <p><b>Conditionally required</b> for GS1 EPCIS conformance. The product code for the commissioned item (e.g. GTIN-14).<sup>1</sup></p> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p>                                                                                                                                                     |
|              |  |  |  |  |  | @type                | 1...1<br>1/*  | String | <p><b>Conditionally required</b> if <b>tl:packagingItemCode</b> is populated. The product code type. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>GTIN - 14</li> <li>NTIN</li> </ul>                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:countryDrugCode   | 0...1<br>0/*  | String | <p><b>Conditionally required</b> for GS1 EPCIS conformance. The national drug code for the commissioned item (e.g. NDC number for US products).<sup>3</sup></p> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p>                                                                                                                            |
|              |  |  |  |  |  | @type                | 1...1<br>1/*  | String | <p><b>Conditionally required</b> if <b>tl:countryDrugCode</b> is populated. The national drug code type using the supported enumeration values and any formatting instructions provided.<sup>4</sup></p> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | tl:manufacturingDate | 0...1<br>0/10 | Date   | The date of manufacture for the serialized item in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>00882025030223<sup>2</sup>GTIN-14<sup>3</sup>8202503022<sup>4</sup>US\_NDC442<sup>5</sup>2017-03-29

| Data Element |  |  |  |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|--|--|--------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:countryMarket         | 0...1<br>0/3  | String | <b>Conditionally required</b> for master data reporting for EU countries reporting to EFPIA EMVS Hub. The country using the standard two or three-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | tl:printedExpirationDate | 0...1<br>0/10 | Date   | Expiration date printed on the label in YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:referenceDocuments    | 0...1<br>-    | -      | Reference document identifier associated with the commissioning activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:poNumber              | 0...1<br>0/*  | String | PO Number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  | tl:poLine                | 0...1<br>0/*  | String | PO Line number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  | tl:workOrderNumber       | 0...1<br>0/*  | String | Work Order number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | tl:referenceIdentifier   | 0...1<br>0/*  | String | Reference identifier (e.g. any type of identifier) associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | tl:extensionField        | 0...*<br>-    | -      | <p>Customer extension point to supply one or more name/value pairs containing additional data attributes not already supported in this message.</p> <p> If this element group is populated both <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated.</p> <p> These extensions are not stored by TraceLink and are only used for outbound mapping purposes when there is a requirement to provide additional data to a partner for this message, such as when a CMO is required to provide additional data fields to the brand owner. In this case, TraceLink would have a custom map for that partner to map these fields outbound. Different partners may have different field requirements and may therefore require that the ExtensionField be populated differently per trade partner.</p> |
|              |  |  |  |  |  | tl:fieldName             | 1...1<br>1/*  | String | <b>Required.</b> The field name provided by the partner that will be receiving the mapped outbound message. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>US<sup>2</sup>2017-03-29<sup>3</sup>POTENCY

| Data Element |  |  |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--|------------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                              |               |         | <div>  The field name must match the field name provided by the trade partner exactly, including case, so that it can be properly detected in the outbound mapping. </div> |
|              |  |  |  |  |  |  | tl:fieldValue                | 1...1<br>1/*  | String  | <b>Required.</b> The field value content that corresponds to <b>tl:fieldName</b> . <sup>1</sup>                                                                                                                                                             |
|              |  |  |  |  |  |  | extension                    | 0...1<br>-    | -       | <b>TransformationEvent</b> extension.                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | tl:decommissionSourceProduct | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs system to implicitly decommission serial numbers used for repackaging. Saves a step in the repack operation so that separate decommission events do not need to be sent. <sup>2</sup>                                   |
|              |  |  |  |  |  |  | tl:registerSourceProduct     | 0...1<br>-    | Boolean | Triggers registration of serial numbers that are not known to the TraceLink system. Defaults to <b>false</b> if not populated. <sup>3</sup> If value = <b>true</b> , <b>tl:repackInputAttributes</b> element group must be populated.                       |
|              |  |  |  |  |  |  | tl:repackInputAttributes     | 0...1<br>-    | -       | <b>Conditionally required</b> if <b>cmn:registerSourceProduct</b> = <b>true</b> . Repack input common attributes group with product info for input product.                                                                                                 |
|              |  |  |  |  |  |  | cbvmdata:lotNumber           | 1...1<br>0/*  | String  | <b>Required.</b> The lot or batch code for the transformation input product in an alphanumeric string of up to 20 characters. <sup>4</sup>                                                                                                                  |
|              |  |  |  |  |  |  | cbvmdata:itemExpirationDate  | 0...1<br>0/*  | Date    | <b>Required.</b> The expiration date for the transformation input product in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmdata="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2018-01-31T17:45:20.0Z">
  <EPCISHeader>
```

<sup>1</sup>100 MG<sup>2</sup>true<sup>3</sup>true<sup>4</sup>B64894<sup>5</sup>2020-04-28

```

<sbdh:StandardBusinessDocumentHeader>
  <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
  <sbdh:Sender>
    <sbdh:Identifier Authority="GLN">0882028677019</sbdh:Identifier>
  </sbdh:Sender>
  <sbdh:Receiver>
    <sbdh:Identifier Authority="GLN">0333331013655</sbdh:Identifier>
  </sbdh:Receiver>
  <sbdh:DocumentIdentification>
    <sbdh:Standard>EPCglobal</sbdh:Standard>
    <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
    <sbdh:InstanceIdentifier>201801311745200001</sbdh:InstanceIdentifier>
    <sbdh:Type>Events</sbdh:Type>
    <sbdh:CreationDateAndTime>2018-01-31T17:45:20.0Z</sbdh:CreationDateAndTime>
  </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
<extension>
  <EPCISMasterData>
    <VocabularyList>
      <Vocabulary type="urn:epcglobal:epcis:vtype:EPCClass">
        <VocabularyElementList>
          <VocabularyElement id="urn:epc:idpat:sgtin:0088202.503033.*">
            <attribute id="http://epcis.tracelink.com/mda/packageTypeCode">PX</attribute>
            <!-- Alternative product codes -->
            <!-- InternalMaterialCode -->
            <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">100335</attribute>
            <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">MANUFACTURER_PART_NUMBER</attribute>
            <!-- US_NDC542 -->
            <attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">00069-
4220-66</attribute>
            <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">FDA_NDC_11</attribute>
            <!-- CH_SWISSMEDIC -->
            <attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">00064-
2206-6</attribute>
            <attribute
id="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode">US_NDC541</attribute>
          </VocabularyElement>
        </VocabularyElementList>
      </Vocabulary>
    </EPCISMasterData>
  </extension>

```

```

        </VocabularyElementList>
      </Vocabulary>
    </VocabularyList>
  </EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <ObjectEvent>
      <eventTime>2018-01-31T00:12:23.8307Z</eventTime>
      <eventTimeZoneOffset>+05:00</eventTimeZoneOffset>
      <epcList>
        <epc>urn:epc:id:sscc:088202.00200000034</epc>
      </epcList>
      <action>ADD</action>
      <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
      <disposition>urn:epcglobal:cbv:disp:active</disposition>
      <bizLocation>
        <id>urn:epc:id:sgln:088202.867701.0</id>
      </bizLocation>
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    <ObjectEvent>
      <eventTime>2018-01-31T00:12:24.830Z</eventTime>
      <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
      <epcList>
        <epc>urn:epc:id:sgtin:0088202.503033.100000000670</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.100000000222</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.100000000225</epc>
      </epcList>
      <action>ADD</action>
      <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
      <disposition>urn:epcglobal:cbv:disp:active</disposition>
      <bizLocation>
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      </bizLocation>
      <extension>
        <ilmd>
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          <cbvmdata:itemExpirationDate>2019-03-31</cbvmdata:itemExpirationDate>
          <tl:commissionEventExtensions>

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        <tl:manufacturingDate>2018-01-31</tl:manufacturingDate>
      </tl:commissionEventExtensions>
    </ilmd>
  </extension>
</ObjectEvent>
<ObjectEvent>
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  <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
  <epcList>
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    <epc>urn:epc:id:sgtin:0088202.503033.100000001021</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001022</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001023</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001024</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001025</epc>
  </epcList>
  <action>ADD</action>
  <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
  <disposition>urn:epcglobal:cbv:disp:active</disposition>
  <bizLocation>
    <id>urn:epc:id:sgln:088202.867701.0</id>
  </bizLocation>
  <extension>
    <ilmd>
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      <cbvmdata:itemExpirationDate>2019-03-31</cbvmdata:itemExpirationDate>
      <tl:commissionEventExtensions>
        <tl:manufacturingDate>2018-01-31</tl:manufacturingDate>
      </tl:commissionEventExtensions>
    </ilmd>
  </extension>
</ObjectEvent>
<ObjectEvent>
  <eventTime>2018-01-31T00:12:25.830Z</eventTime>
  <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
  <epcList>
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    <epc>urn:epc:id:sgtin:0088202.503033.100000001021</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001022</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001023</epc>

```

```

        <epc>urn:epc:id:sgtin:0088202.503033.100000001024</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.100000001025</epc>
    </epcList>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
    <disposition>urn:epcglobal:cbv:disp:active</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:088202.867701.0</id>
    </bizLocation>
    <extension>
        <ilmd>
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            <cbvmdata:itemExpirationDate>2019-03-31</cbvmdata:itemExpirationDate>
            <tl:commissionEventExtensions>
                <tl:manufacturingDate>2018-01-31</tl:manufacturingDate>
            </tl:commissionEventExtensions>
        </ilmd>
    </extension>
</ObjectEvent>
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        <epc>urn:epc:id:sgtin:088202.0503022.100000001021</epc>
    </epcList>
    <action>DELETE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
    <disposition>urn:epcglobal:cbv:disp:inactive</disposition>
    <readPoint>
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    </readPoint>
    <tl:decommissionEventExtensions>
        <tl:transactionDate>2017-02-19</tl:transactionDate>
        <tl:disaggregateFromParent>false</tl:disaggregateFromParent>
        <tl:marketCountryCode>RU</tl:marketCountryCode>
        <tl:businessPartyInfo>
            <tl:businessId type="SGLN">088202.867701.0</tl:businessId>
            <tl:businessClassification>DISTRIBUTOR</tl:businessClassification>
            <tl:BusinessPartyDetail>

```



```

        <tl:businessName>Russia Pharma</tl:businessName>
        <tl:street1>Bolshoy Devyatinsky Lane 8</tl:street1>
        <tl:city>Moskva</tl:city>
        <tl:stateOrRegion>Presnensky</tl:stateOrRegion>
        <tl:postalCode>121099</tl:postalCode>
        <tl:country>RU</tl:country>
        <tl:addressObjectGUID>19406454-0022-000C-00B0-000000000152</tl:addressObjectGUID>
        <tl:houseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</tl:houseGUID>
    </tl:BusinessPartyDetail>
</tl:businessPartyInfo>
    <tl:warehouseOperatorName>John Smith</tl:warehouseOperatorName>
    <tl:decommissionReasonCode>PRODUCTION_DEFECT</tl:decommissionReasonCode>
    <tl:reasonDescription>Defect from production</tl:reasonDescription>
</tl:decommissionEventExtensions>
</ObjectEvent>
<ObjectEvent>
    <eventTime>2017-02-19T00:12:25.834Z</eventTime>
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    <epcList>
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        <epc>urn:epc:id:sgtin:088202.0503022.100000001021</epc>
    </epcList>
    <action>DELETE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:destroying</bizStep>
    <disposition>urn:epcglobal:cbv:disp:destroyed</disposition>
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    </readPoint>
    <tl:destroyEventExtensions>
        <tl:transactionDate>2017-01-30</tl:transactionDate>
        <tl:disaggregateFromParent>false</tl:disaggregateFromParent>
        <tl:marketCountryCode>RU</tl:marketCountryCode>
        <tl:businessPartyInfo>
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            <tl:businessClassification>DISTRIBUTOR</tl:businessClassification>
            <tl:BusinessPartyDetail>
                <tl:businessName>Russia Pharma</tl:businessName>
                <tl:street1>Bolshoy Devyatinsky Lane 8</tl:street1>
                <tl:city>Moskva</tl:city>
                <tl:stateOrRegion>Presnensky</tl:stateOrRegion>

```

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        <tl:postalCode>121099</tl:postalCode>
        <tl:country>RU</tl:country>
        <tl:addressObjectGUID>19406454-0022-000C-00B0-000000000152</tl:addressObjectGUID>
        <tl:houseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</tl:houseGUID>
    </tl:BusinessPartyDetail>
</tl:businessPartyInfo>
<tl:warehouseOperatorName/>
<tl:decommissionReasonCode>DAMAGED</tl:decommissionReasonCode>
<tl:reasonDescription/>
</tl:destroyEventExtensions>
</ObjectEvent>
<AggregationEvent>
    <eventTime>2016-08-31T00:12:27</eventTime>
    <eventTimeZoneOffset>-04:09</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:088202.00200000034</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:0088202.503033.100000000670</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.100000000222</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.100000000225</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
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    </bizLocation>
</AggregationEvent>
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<ObjectEvent>
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    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
    <epcList/>
    <action>OBSERVE</action>
    <bizStep>http://epcis.tracelink.com/bizstep/releasing</bizStep>
    <disposition>http://epcis.tracelink.com/disp/released</disposition>
    <readPoint>
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    </readPoint>
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18">urn:epcglobal:cbv:bt:0882028677019:H9022413</bizTransaction>
    <bizTransaction type="http://epcis.tracelink.com/hc/btt/declarationconformity" date="2019-03-
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    </bizTransactionList>
    <extension>
      <ilmd>
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          <tl:internalMaterialCode>l1002-5412-1</tl:internalMaterialCode>
          <tl:countryDrugCode type="US_NDC541">0069-4220-66</tl:countryDrugCode>
          <tl:qualityControlEntityId type="GLN">0882028677010</tl:qualityControlEntityId>
          <tl:productionQty>
            <tl:packagingItemCode type="GTIN-14">50300694220667</tl:packagingItemCode>
            <!-- <tl:companyPrefix>503006</tl:companyPrefix> -->
            <tl:packagingLevel>EA</tl:packagingLevel>
            <tl:quantityReported>100</tl:quantityReported>
          </tl:productionQty>
        </tl:productReleaseEventExtensions>
      </ilmd>
    </extension>
  </ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

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## Errors

| Data Element                                 | Error Message                                              | Description                                                                                   |
|----------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Class 1</b>                               |                                                            |                                                                                               |
| sbdh:Sender   sbdh:Identifier   @Authority   | Valid Sender/Identifier Authority is required !!!          | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| sbdh:Receiver   sbdh:Identifier   @Authority | Valid Receiver/Identifier Authority is required !!!        | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement   @id                      | Item code is required in source VocabularyElement[@id] !!! | The error occurs if the source is empty or null.                                              |
|                                              | SGTIN or NTIN in VocabularyElement id is required !!!      | The error occurs if the source is not an SGTIN or NTIN.                                       |
| attribute                                    | Valid packagingLevel code is required !!!                  | The error occurs if the source is present, but there is no matching entry                     |

| Data Element                                 | Error Message                                                        | Description                                                                                   |
|----------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|                                              |                                                                      | in the lookup file.                                                                           |
|                                              | Packaging Level is required if header master data is populated !!!   | The error occurs if header master data is populated, but the source is empty or null.         |
|                                              | Only one country drug code is supported !!!                          | The error occurs if more than one country drug code is present.                               |
| VocabularyElement   @id                      | GLN party type not supported. SGLN is required !!!                   | The error occurs if the source is not an SGLN.                                                |
|                                              | Valid decommissioning event location identifier type is required !!! | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| attribute                                    | Decommissioning event location business name is required !!!         | The error occurs if the source is empty or null.                                              |
|                                              | Valid business classification code is required !!!                   | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                                              | Decommissioning event location street address is required !!!        | The error occurs if the source is empty or null.                                              |
|                                              | Decommissioning event location city is required !!!                  | The error occurs if the source is empty or null.                                              |
|                                              | 3-digit numeric District code required for country India !!!         | The error occurs if the source is empty or null.                                              |
|                                              | Decommissioning event location state or region is required !!!       | The error occurs if the source is empty or null.                                              |
|                                              | Decommissioning event location country is required !!!               | The error occurs if the source is empty or null.                                              |
| VocabularyElement   @id                      | Valid destroy event location identifier type is required !!!         | The error occurs if the source is empty or null.                                              |
| attribute                                    | Destroy event location business name is required !!!                 | The error occurs if the source is empty or null.                                              |
|                                              | Destroy event location street address is required !!!                | The error occurs if the source is empty or null.                                              |
|                                              | Destroy event location city is required !!!                          | The error occurs if the source is empty or null.                                              |
|                                              | Destroy event location city is required !!!                          | The error occurs if the source is empty or null.                                              |
|                                              | Destroy event location state or region is required !!!               | The error occurs if the source is empty or null.                                              |
|                                              | Destroy event location country is required !!!                       | The error occurs if the source is empty or null.                                              |
| ObjectEvent (Commissioning Events)           | At least one commissioning event is required !!!                     | The error occurs if the source is empty or null.                                              |
| epcList   epc                                | Invalid EPC format !!!                                               | The error occurs if the source is invalid, empty, or null.                                    |
| ObjectEvent (Commissioning Events)   bizStep | bizStep urn:epcglobal:cbv:bizstep:commissioning is required for      | The error occurs if the source does not equal                                                 |

| Data Element                                                 | Error Message                                                                           | Description                                                                                                            |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|                                                              | ObjectEvent commissioning !!!                                                           | "urn:epcglobal:cbv:bizstep:commissioning" for a commissioning event.                                                   |
| ObjectEvent (Commissioning Events)   <b>disposition</b>      | Disposition urn:epcglobal:cbv:disp:active is required for ObjectEvent commissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:active".                                         |
| ObjectEvent (Commissioning Events)   bizLocation   <b>id</b> | Event location in the commissioning event is required !!!                               | The error occurs if the source is empty or null.                                                                       |
| cbvmdata:lotNumber                                           | Lot number is required !!!                                                              | The error results if the source is GTIN or NTIN, but source is empty or null.                                          |
| cbvmdata:itemExpirationDate                                  | Expiration date is required !!!                                                         | The error results if the source is GTIN or NTIN, but source is empty or null.                                          |
| tl:packagingLevel                                            | Packaging Level is required !!!                                                         | The error results if the source is GTIN or NTIN, but source is empty or null.                                          |
|                                                              | Valid packaging level code required !!!                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                          |
| tl:packagingItemCode   <b>@type</b>                          | Packaging item code type required if packagingItemCode is populated !!!                 | The error occurs if source tl:packagingItemCode is populated, but the source is empty or null.                         |
| tl:countryDrugCode   <b>@type</b>                            | Country drug code type is required if country drug code is populated !!!                | The error occurs if tl:countryDrugCode is populated, but the source is empty or null.                                  |
| tl:fieldName                                                 | Field name is required if ExtensionField group present in source !!!                    | The error occurs if tl:extensionField group is populated, but the source is empty or null.                             |
| tl:fieldValue                                                | Field value is required if ExtensionField group present in source !!!                   | The error occurs if the source is empty or null.                                                                       |
|                                                              | Field value is required !!!                                                             | The error occurs if the source is empty or null.                                                                       |
| ObjectEvent (Decommissioning Events)   <b>action</b>         | Action DELETE is required for decommissioning !!!                                       | The error occurs if the source does not equal "DELETE" for decommission.                                               |
| ObjectEvent (Decommissioning Events)   <b>bizStep</b>        | bizStep urn:epcglobal:cbv:bizstep:decommissioning is required for decommissioning !!!   | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:decommissioning" for a decommissioning event. |
| ObjectEvent (Decommissioning Events)   <b>disposition</b>    | Disposition urn:epcglobal:cbv:disp:inactive is required for decommissioning !!!         | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:inactive".                                       |

| Data Element                                                 | Error Message                                                                                        | Description                                                                                                             |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| ObjectEvent (Decommissioning Events)   readPoint   <b>id</b> | Source read point ID is required !!!                                                                 | The error occurs if the source is empty or null.                                                                        |
|                                                              | Valid decommissioning event location identifier type is required !!!                                 | The error occurs if the source is invalid.                                                                              |
| bizTransaction   <b>@type</b>                                | Valid bizTransaction type is required if bizTransaction is populated !!!                             | The error occurs if bizTransaction is populated but the source is empty or null, or if the source is not a valid value. |
| tl:marketCountryCode                                         | Market Country Code must be at least two characters !!!                                              | The error occurs if the source is populated, but is less than 2 characters.                                             |
| tl:decommissionReasonCode                                    | Valid reason code is required !!!                                                                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                           |
| tl:destructionMethod                                         | Valid destruction method code is required !!!                                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                           |
| ObjectEvent (Destroying Events)   <b>action</b>              | Action DELETE is required for destroying !!!                                                         | The error occurs if the source does not equal "DELETE" for destroying.                                                  |
| ObjectEvent (Destroying Events)   <b>bizStep</b>             | bizStep urn:epcglobal:cbv:bizstep:destroying is required for destroying !!!                          | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:destroying" for a destroying event.            |
| ObjectEvent (Destroying Events)   <b>disposition</b>         | Disposition urn:epcglobal:cbv:disp:destroyed is required for destroying !!!                          | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:destroyed".                                       |
| ObjectEvent (Destroying Events)   readPoint   <b>id</b>      | Source read point ID is required !!!                                                                 | The error occurs if the source is empty or null.                                                                        |
|                                                              | Valid destroy event location identifier type is required !!!                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.                           |
| AggregationEvent   <b>parentID</b>                           | Invalid EPC format !!!                                                                               | The error occurs if the source is invalid.                                                                              |
| AggregationEvent   <b>bizStep</b>                            | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!                   | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing" for a aggregation event.              |
| AggregationEvent   <b>disposition</b>                        | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!!              | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress", or is empty or null.                |
| AggregationEvent   bizLocation   <b>id</b>                   | Event location in the aggregation event is required !!!                                              | The error occurs if the source is empty or null.                                                                        |
| ObjectEvent (Product Release Events)                         | Only one product release event is required !!!                                                       | The error occurs if more than one product release event is present.                                                     |
|                                                              | Product release event data is required !!!                                                           | The error occurs if the source is empty or null.                                                                        |
| ObjectEvent (Product Release Events)   <b>bizStep</b>        | bizStep http://epcis.tracelink.com/bizstep/releasing is required for ObjectEvent product release !!! | The error occurs if the source does not equal "http://epcis.tracelink.com/bizstep/releasing" for a product release.     |

| Data Element                                                 | Error Message                                                                                        | Description                                                                                                                     |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| ObjectEvent (Product Release Events)   <b>disposition</b>    | Disposition http://epcis.tracelink.com/disp/released is required for ObjectEvent product release !!! | The error occurs if the source does not equal "http://epcis.tracelink.com/disp/released".                                       |
| ObjectEvent (Product Release Events)   readPoint   <b>id</b> | Event location in the product release event is required !!!                                          | The error occurs if the source is empty or null.                                                                                |
| tl:qualityControlEntityId                                    | Quality control entity Id is required if bizTransaction is populated !!!                             | The error occurs if bizTransaction in the ObjectEvent for product release events is populated, but the source is empty or null. |
| tl:qualityControlEntityId   <b>@type</b>                     | Valid quality control entity identifier type is required !!!                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.                                   |
| choice1                                                      | Only one of either packaging item code or company prefix may be present !!!                          | The error occurs if both tl:packagingItemCode and tl:companyPrefix are populated, or both are empty or null.                    |
| tl:quantityReported                                          | Quantity reported is required !!!                                                                    | The error occurs if the source is empty or null.                                                                                |
| inputEPCList                                                 | One of either inputEPCList OR inputQuantityList is required !!!                                      | The error occurs if both inputQuantityList and the source are null or empty.                                                    |
| inputEPCList   <b>epc</b>                                    | Invalid EPC format !!!                                                                               | The error occurs if the source is in a format other than SGTIN or NTIN.                                                         |
|                                                              | SSCC code is invalid in inputEPCList !!!                                                             | The error occurs if the source is not an SGTIN or NTIN.                                                                         |
| quantityElement   <b>epcClass</b>                            | Lot number is required !!!                                                                           | The error occurs if the source is empty or null.                                                                                |
|                                                              | Valid item code is required !!!                                                                      | The error occurs if the source is invalid.                                                                                      |
| quantityElement   <b>quantity</b>                            | Input quantity for epcClass is required !!!                                                          | The error occurs if inputQuantityList is populated, but the source is empty or null.                                            |
| outputEPCList                                                | Output epc list is required !!!                                                                      | The error occurs if the source is empty or null.                                                                                |
| outputEPCList   <b>epc</b>                                   | China resource code serial number is not supported. Serial number must be NTIN or SGTIN !!!          | The error occurs if the source is not a NTIN or SGTIN.                                                                          |
|                                                              | SSCC code is invalid in outputEPCList !!!                                                            | The error occurs if the source is invalid.                                                                                      |
|                                                              | epc serial number is required !!!                                                                    | The error occurs if the source is empty or null.                                                                                |
|                                                              | Invalid EPC format !!!                                                                               | The error occurs if the source is invalid.                                                                                      |
| tl:repackInputAttributes                                     | repackInputAttributes group is required if registerSourceProduct equals true !!!                     | The error occurs if tl:registerSourceProduct is set to true, but the source is empty or null.                                   |
| cbvmda:itemExpirationDate                                    | Item expiration date is required !!!                                                                 | The error occurs if tl:repackInputAttributes is present but the source is                                                       |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                    | Description                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   |                                                                                                                                                                  | missing or null.                                                                                                                                                                          |
| <b>Class 2</b>                                                                                                                                                    |                                                                                                                                                                  |                                                                                                                                                                                           |
| tl:decommissionReasonCode                                                                                                                                         | Reason Code is required for products sold in Russia                                                                                                              | The error occurs if a Target Market in Product Master Data for the decommissioned or destroyed product = "RU", but the source is empty or null.                                           |
| tl:destructionMethod                                                                                                                                              | Destruction Method is required for products sold in Russia                                                                                                       | The error occurs if a Target Market in Product Master Data for the decommissioned or destroyed product = "RU", but the source is empty or null.                                           |
| bizTransaction                                                                                                                                                    | A Transaction Identifier for either 'Declaration of Conformity' or 'Certificate of Conformity' is required for products that are commissioned and sold in Russia | The error occurs if a Target Market in Product Master Data for the released product = "RU" and the lot was commissioned and sold in Russia, but the source is empty or null.              |
| bizTransaction   @date                                                                                                                                            | Transaction Identifier Date is required for products that are commissioned and sold in Russia                                                                    | The error occurs if a Target Market in Product Master Data for the decommissioned or destroyed product = "RU" and the lot was commissioned in Russia, but the source is empty or null.    |
| bizTransaction   @type                                                                                                                                            | Transaction Identifier for 'Removal from Circulation' is required for products sold in Russia                                                                    | The error occurs if a Target Market in Product Master Data for the decommissioned or destroyed product = "RU", but the source does not equal "http://epcis.tracelink.com/hc/btt/removal". |
| tl:addressObjectGUID                                                                                                                                              | AddressObjectGUID cannot be blank for Country RU.                                                                                                                | The error occurs if tl:country = "RU", but the source is empty or null.                                                                                                                   |
| tl:qualityControlEntityId                                                                                                                                         | Quality Control Entity ID is required for products that are commissioned outside of Russia and sold in Russia                                                    | The error occurs if a Target Market in Product Master Data for the released product = "RU" and the lot was commissioned outside of Russia, but the source is empty or null.               |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                  |                                                                                                                                                                                           |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                  |                                                                                                                                                                                           |

## Release Product Request & Response (SOAP)

### Release Product Request

#### Guidelines



| Data Element     |                |                    |                 |                        | Occurs Length    | Format       | Description                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|----------------|--------------------|-----------------|------------------------|------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| soapenv:Envelope |                |                    |                 |                        | 1...1<br>-       | -            | <b>Required.</b> SOAP Envelope root element.                                                                                                                                                                                                                                                                                                                                  |
|                  | soapenv:Header |                    |                 |                        | 1...1<br>-       | -            | <b>Required.</b> Not used by TraceLink. SOAP Message Header.                                                                                                                                                                                                                                                                                                                  |
|                  | soapenv:Body   |                    |                 |                        | 1...1<br>-       | -            | <b>Required.</b> SOAP Message Body.                                                                                                                                                                                                                                                                                                                                           |
|                  |                | urn:ReleaseProduct |                 |                        | 1...1<br>-       | -            | <b>Required.</b> ReleaseProduct is a request message that sets all serial numbers in a lot to "quality released".                                                                                                                                                                                                                                                             |
|                  |                |                    | LotQueryRequest |                        | 0...1<br>-       | -            | <b>Required.</b> Queries the serialization status of an ItemCode and Lot.                                                                                                                                                                                                                                                                                                     |
|                  |                |                    |                 | ItemCode               | 1...1<br>1/*     | String       | <b>Required.</b> Packaging level item code value (e.g. 00882025030220).                                                                                                                                                                                                                                                                                                       |
|                  |                |                    |                 | ItemCodeType           | 0...1<br>1/*     | String       | Identifies the packaging level item code type (e.g. GTIN14). See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                                                                              |
|                  |                |                    |                 | Lot                    | 0...1<br>1/*     | String       | Lot Number associated with the designated serial numbers at time of the ReleaseProduct request (e.g. L201409132).                                                                                                                                                                                                                                                             |
|                  |                |                    |                 | EventDateTime          | 0...1<br>-       | Date         | Date and time of the event in XSD date time format in GMT (i.e. YYYY-MM-DDTHH:MM:SSZ). If empty or null, EventDateTime defaults to the current date time.                                                                                                                                                                                                                     |
|                  |                |                    |                 | QualityControlEntityID | 0...1<br>1/*     | String       | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> and the lot was commissioned outside of Russia. Business or location identifier of the entity responsible for quality control.                                                                                                                                                 |
|                  |                |                    |                 |                        | @identifiertype  | 0...1<br>1/* | <b>Required.</b> The business or location identifier type. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                   |
|                  |                |                    |                 |                        | @identifiervalue | 0...1<br>1/* | <b>Required.</b> The value of the entity responsible for quality control.                                                                                                                                                                                                                                                                                                     |
|                  |                |                    |                 | Transactions           | 0...1<br>-       | -            | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <b>RU</b> and the lot was commissioned in Russia. The transaction identifier associated with the product being released. <div>  If populated, QualityControlEntityID must also be populated. </div> |

| Data Element |  |  |  |  |                    | Occurs Length | Format  | Description                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | Transaction        | 1...*<br>-    | -       | <b>Required.</b> List of one or more transaction identifiers.                                                                                                                                                                  |
|              |  |  |  |  | ItemID             | 0...1<br>1/*  | String  | <b>Required.</b> The transaction identifier associated with the status update.                                                                                                                                                 |
|              |  |  |  |  | ItemType           | 0...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type.<br>Valid values: <ul style="list-style-type: none"> <li>CERTIFICATECONFORMITY</li> <li>CIVILCIRCULATION</li> <li>DECLARATIONCONFORMITY</li> <li>STATECONFIRMATION</li> </ul> |
|              |  |  |  |  | Date               | 0...1<br>1/*  | String  | <b>Conditionally required</b> if at least one Target Market in Product Master Data = <a href="#">RU</a> and the lot was commissioned in Russia. The date of the transaction in XML YYYY-MM-DD format.                          |
|              |  |  |  |  | ProductionQuantity | 0...*<br>-    | -       | List of each aggregation hierarchy level. Used to optionally validate serial number quantities.                                                                                                                                |
|              |  |  |  |  | PackagingItemCode  | 0...1<br>-    | -       | <b>Conditionally required</b> if CompanyPrefix is not populated. Identifies the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data.                                                  |
|              |  |  |  |  | ItemCodeType       | 1...1<br>1/*  | String  | <b>Required.</b> The packaging level item code type.<br>See the <a href="#">PackagingItemCodeType</a> enumeration list for valid values.                                                                                       |
|              |  |  |  |  | ItemCode           | 1...1<br>1/*  | String  | <b>Required.</b> The packaging level item code value.                                                                                                                                                                          |
|              |  |  |  |  | CompanyPrefix      | 0...1<br>0/*  | String  | <b>Conditionally required</b> if PackagingItemCode is not populated. The GS1 company prefix (e.g. 038522).                                                                                                                     |
|              |  |  |  |  | PackagingLevel     | 1...1<br>1/*  | String  | <b>Required.</b> The packaging level of the commissioned item.<br>See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                    |
|              |  |  |  |  | QuantityReported   | 1...1<br>1/*  | Integer | <b>Required.</b> Quantity reported for the released product.                                                                                                                                                                   |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
```

```

<soapenv:Header/>
<soapenv:Body>
  <urn:ReleaseProduct>
    <LotQueryRequest>
      <ItemCode>00882025030220</ItemCode>
      <ItemCodeType>GTIN14</ItemCodeType>
      <Lot>L201409132</Lot>
      <EventDateTime>2019-07-1609:22:01Z</EventDateTime>
      <QualityControlEntityID identifiertype="GLN" identifiervalue="6667771013655">
      <Transactions>
        <Transaction>
          <ItemID>INVOICE</ItemID>
          <ItemType>INV007</ItemType>
          <Date>2019-07-16</Date>
        </Transaction>
      </Transactions>
      <ProductionQuantity>
        <PackagingItemCode>
          <ItemCodeType>GTIN-14</ItemCodeType>
          <ItemCode>00992326050107</ItemCode>
        </PackagingItemCode>
        <CompanyPrefix>038522</CompanyPrefix>
        <PackagingLevel>EA</PackagingLevel>
        <QuantityReported>100</QuantityReported>
      </ProductionQuantity>
      </QualityControlEntityID>
    </LotQueryRequest>
  </urn:ReleaseProduct>
</soapenv:Body>
</soapenv:Envelope>

```

## Errors

| Exception Code     | Exception Message                                                                 |
|--------------------|-----------------------------------------------------------------------------------|
| LOTALREADYRELEASED | Lot <lot number> for item <item number> has already been set to Quality Released. |
| LOTNOTFOUND        | Lot <lot number> for item <item number> does not exist.                           |

| Exception Code               | Exception Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VALIDATION                   | The parameter itemCode is missing or has an invalid value.                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | The parameter itemCodeType is missing or has an invalid value.                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                              | The parameter lot is missing or has an invalid value.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| QUALITYCONTROLENTITYRUSSIA   | Quality Control Entity ID is required for products that are commissioned outside of Russia and sold in Russia.                                                                                                                                                                                                                                                                                                                                                                   |
| TRANSACTIONIDRUSSIA          | A Transaction Identifier for either 'Declaration of Conformity' or 'Certificate of Conformity' is required for products that are commissioned and sold in Russia.                                                                                                                                                                                                                                                                                                                |
|                              | Transaction Identifier Date is required for products that are commissioned and sold in Russia.                                                                                                                                                                                                                                                                                                                                                                                   |
| PRODUCTIONQUANTITYVALIDATION | Product Release transaction processing failed due to serial number quantity verification failure. [quantity of commissioned serial number] at [packaging level] level found in the system but Product Release message reported lower quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location].  |
|                              | Product Release transaction processing failed due to serial number quantity verification failure. [Quantity of commissioned serial number] at [packaging level] level found in the system but Product Release message reported higher quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]. |
|                              | Can not process Product Release transaction. The packaging level quantities in the transaction do not match the packaging level quantities in the aggregation hierarchy. Possibly the aggregation events have not yet been processed.                                                                                                                                                                                                                                            |

## Release Product Response

### Guidelines



| Data Element |        |                            | Occurs Length | Type | Description                                        |
|--------------|--------|----------------------------|---------------|------|----------------------------------------------------|
| S:Envelope   |        |                            | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element.       |
|              | S:Body |                            | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Body.                |
|              |        | ns2:ReleaseProductResponse | 1...1         | -    | <b>Required.</b> Release Product response message. |

| Data Element |  |  |  |  |                  | Occurs Length | Type   | Description                                                                                  |
|--------------|--|--|--|--|------------------|---------------|--------|----------------------------------------------------------------------------------------------|
|              |  |  |  |  |                  |               |        |                                                                                              |
|              |  |  |  |  | TLResponse       | 0...1<br>-    | -      | <b>Required.</b> TraceLink ReleaseProduct response.                                          |
|              |  |  |  |  | Success          | 0...1<br>-    | -      | <b>Required.</b> Indicates if the ReleaseProduct request successfully processed (e.g. true). |
|              |  |  |  |  | ExceptionReturn  | 0...1<br>-    | -      | <b>Conditionally required</b> if Success = <code>false</code> . Error information.           |
|              |  |  |  |  | CallException    | 1...*<br>-    | -      | <b>Required.</b> Contains error details.                                                     |
|              |  |  |  |  | ExceptionCode    | 0...1<br>0/*  | String | <b>Required.</b> Error code for exception.                                                   |
|              |  |  |  |  | ExceptionMessage | 0...1<br>0/*  | String | <b>Conditionally required.</b> Message that further describes the error condition.           |

## Example

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:ReleaseProductResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns2:ReleaseProductResponse>
  </S:Body>
</S:Envelope>

```

# End of Batch APIs

## Why do I use these messages?

Use the following messages to declare an End of Batch, which captures the quantity of serial numbers produced for a specific product and lot and confirms that the packaging line system correctly fulfilled the production request. TraceLink verifies that the quantity of serial numbers in the End of Batch matches the quantity that were commissioned for the lot and captured in a Disposition Assigned message (see the *Serial Number Exchange API Guide* for more information). TraceLink might also verify that the quantity of serial numbers falls within the expected batch yield threshold for the product, if configured in Product Master Data.

## Which reports do these messages generate?

These messages generate the [OMS Domestic Utilisation](#) and [915 - Multi Pack](#) reports in the Russia Compliance application if their contents meet the report conditions.

## End of Batch (XML)

### Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 4 hours.

**Message Type:** SNX\_END\_OF\_BATCH

**Info Exchange Display Name:** End of Batch Notification

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element             | Occurs | Format | Length | Enum | Req | Description                        |
|--------------------------|--------|--------|--------|------|-----|------------------------------------|
| snx:SNXEndOfBatchMessage | 1..1   | -      | -      | -    | M   | The message root.                  |
| snx:ControlFileHeader    | 1..1   | -      | -      | -    | M   | The header fields for the message. |

| Data Element |                          | Occurs | Format | Length | Enum                            | Req | Description                                                                                                                                                                                                                               |
|--------------|--------------------------|--------|--------|--------|---------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | cmn:FileSenderNumber     | 1...1  | String | 1/20   | -                               | M   | Identifies the sender of the message. When the sender is the TraceLink application owner, use this value in the application link key to identify the link. <sup>1</sup>                                                                   |
|              | cmn:FileReceiverNumber   | 1...1  | String | 1/*    | -                               | M   | Identifies the receiver of the message. When the receiver is the TraceLink application owner, use this value in the application link key to identify the link. <sup>2</sup>                                                               |
|              | cmn:FileControlNumber    | 1...1  | String | 1/*    | -                               | M   | The unique file identifier the sender assigns. <sup>3</sup>                                                                                                                                                                               |
|              | cmn:FileDate             | 1...1  | Date   | 10/10  | -                               | M   | The creation data of the file in XML date YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                 |
|              | cmn:FileTime             | 1...1  | Time   | 9/9    | -                               | M   | The time of the file's generation in XML HH:MM:SSZ format. <sup>5</sup>                                                                                                                                                                   |
|              | snx:MessageBody          | 1...1  | -      | -      | -                               | O   | The End of Batch message details.                                                                                                                                                                                                         |
|              | choice%1                 | 1...1  | Choice | -      | -                               | M   | Choice 1 is mandatory within the Message Body.<br> Populate either InternalMaterialCode or CountryDrugCode. An error results if neither option is set. |
|              | cmn:InternalMaterialCode | 0...1  | String | 1/*    | -                               | C   | The internal material number for the product in the batch. <sup>6</sup><br> Mandatory if cmn:CountryDrugCode is not populated.                         |
|              | cmn:CountryDrugCode      | 0...1  | String | 1/*    | -                               | C   | The National Drug Code (NDC) for the product in the batch. <sup>7</sup><br> Mandatory if cmn:InternalMaterialNumber is not populated.                  |
|              | @type                    | 1...1  | String | 1/*    | <a href="#">CountryDrugCode</a> | M   | The NDC type using the supported enumeration values.                                                                                                                                                                                      |
|              | cmn:LotNumber            | 1...1  | String | 0/*    | -                               | M   | The lot or batch code for the serialized item in an alphanumeric string. <sup>8</sup>                                                                                                                                                     |
|              | cmn:ProductionQuantity   | 1...*  | -      | -      | -                               | M   | The production quantities in the batch. This is a looping group with reported production quantities.                                                                                                                                      |

<sup>1</sup>7777776067344<sup>2</sup>8888884043588<sup>3</sup>0000000004<sup>4</sup>2017-02-16<sup>5</sup>06:30:32Z<sup>6</sup>9859263<sup>7</sup>100006302<sup>8</sup>QA454687

| Data Element |  |  |                       | Occurs | Format  | Length | Enum                              | Req | Description                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|-----------------------|--------|---------|--------|-----------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                       |        |         |        |                                   |     | A minimum of one entry is required for the Each (EA) packaging level. All other packaging levels are optional.                                                                                                                                                                                                                   |
|              |  |  | choice%1              | 1...1  | Choice  | -      | -                                 | M   | <p>Choice 1 is mandatory within the ProductionQuantity element.</p> <p> Populate either InternalMaterialCode or CountryDrugCode. An error results if neither option is set.</p>                                                               |
|              |  |  | cmn:PackagingItemCode | 0...1  | String  | 1/*    | -                                 | C   | <p>The packaging level product code (e.g. GTIN-14) for the packaging level.<sup>1</sup></p> <p> Mandatory if cmn:CompanyPrefix is not populated.</p>                                                                                          |
|              |  |  | @type                 | 1...1  | String  | 1/*    | <a href="#">PackagingItemCode</a> | C   | The product code type using the supported enumeration values (e.g. GTIN-14). Required if cmn:PackagingItemCode is populated.                                                                                                                                                                                                     |
|              |  |  | cmn:CompanyPrefix     | 0...1  | String  | 0/*    | -                                 | C   | <p>The GS1 company prefix.<sup>2</sup></p> <p> Mandatory if cmn:PackagingItemCode is not populated.</p>                                                                                                                                       |
|              |  |  | cmn:PackagingLevel    | 1...1  | String  | 1/*    | <a href="#">PackagingLevel</a>    | M   | The packaging level associated with the PackagingItemCode using the supported enumeration values. Minimally one Each per Product Code must be provided. All other aggregation levels are optional.                                                                                                                               |
|              |  |  | cmn:QuantityReported  | 1...1  | Integer | -      | -                                 | M   | <p>The reported serial number quantity from the packaging location that commissioned the packaging level.<sup>3</sup></p> <ul style="list-style-type: none"> <li>• Mandatory for EA packaging level.</li> <li>• Optional for all other levels.</li> </ul> <p>If not submitted with the EA Packaging Level, an error results.</p> |

## Examples

### Internal Material Code and Packaging Item Code Example

```
<?xml version="1.0" encoding="UTF-8"?>
<snx:SNXEndOfBatchMessage xmlns:snx="urn:tracelink:mapper:sl:serial_number_exchange"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
```

<sup>1</sup>07008522880081

<sup>2</sup>038522

<sup>3</sup>10000



```

<snx:ControlFileHeader>
  <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
  <cmn:FileReceiverNumber>8888882028655</cmn:FileReceiverNumber>
  <cmn:FileControlNumber>0000000004</cmn:FileControlNumber>
  <cmn:FileDate>2020-08-17</cmn:FileDate>
  <cmn:FileTime>11:43:32Z</cmn:FileTime>
</snx:ControlFileHeader>
<snx:MessageBody>
  <cmn:InternalMaterialCode>133661</cmn:InternalMaterialCode>
  <cmn:LotNumber>LOT17</cmn:LotNumber>
  <snx:ProductionQuantity>
    <cmn:PackagingItemCode type="GTIN-14">00992326050107</cmn:PackagingItemCode>
    <cmn:PackagingLevel>EA</cmn:PackagingLevel>
    <cmn:QuantityReported>10000</cmn:QuantityReported>
  </snx:ProductionQuantity>
</snx:MessageBody>
</snx:SNXEndOfBatchMessage>

```

## Internal Material Code and Company Prefix Example

```

<?xml version="1.0" encoding="UTF-8"?>
<snx:SNXEndOfBatchMessage xmlns:snx="urn:tracelink:mapper:sl:serial_number_exchange"
  xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <snx:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028655</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>0000000004</cmn:FileControlNumber>
    <cmn:FileDate>2020-08-17</cmn:FileDate>
    <cmn:FileTime>11:43:32Z</cmn:FileTime>
  </snx:ControlFileHeader>
  <snx:MessageBody>
    <cmn:InternalMaterialCode>133661</cmn:InternalMaterialCode>
    <cmn:LotNumber>LOT17</cmn:LotNumber>
    <snx:ProductionQuantity>
      <cmn:CompanyPrefix>038522</cmn:CompanyPrefix>
      <cmn:PackagingLevel>EA</cmn:PackagingLevel>
      <cmn:QuantityReported>10000</cmn:QuantityReported>
    </snx:ProductionQuantity>
  </snx:MessageBody>

```

```
</snx:SNXEndOfBatchMessage>
```

## Country Drug Code and Packaging Item Code Example

```
<?xml version="1.0" encoding="UTF-8"?>
<snx:SNXEndOfBatchMessage xmlns:snx="urn:tracelink:mapper:sl:serial_number_exchange"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <snx:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028655</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>0000000004</cmn:FileControlNumber>
    <cmn:FileDate>2020-08-17</cmn:FileDate>
    <cmn:FileTime>11:43:32Z</cmn:FileTime>
  </snx:ControlFileHeader>
  <snx:MessageBody>
    <cmn:CountryDrugCode type="US_NDC542">05552-5500-10</cmn:CountryDrugCode>
    <cmn:LotNumber>LOT17</cmn:LotNumber>
    <snx:ProductionQuantity>
      <cmn:PackagingItemCode type="GTIN-14">00992326050107</cmn:PackagingItemCode>
      <cmn:PackagingLevel>EA</cmn:PackagingLevel>
      <cmn:QuantityReported>10000</cmn:QuantityReported>
    </snx:ProductionQuantity>
  </snx:MessageBody>
</snx:SNXEndOfBatchMessage>
```

## Country Drug Code and Company Prefix Example

```
<?xml version="1.0" encoding="UTF-8"?>
<snx:SNXEndOfBatchMessage xmlns:snx="urn:tracelink:mapper:sl:serial_number_exchange"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <snx:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028655</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>0000000004</cmn:FileControlNumber>
    <cmn:FileDate>2020-08-17</cmn:FileDate>
    <cmn:FileTime>11:43:32Z</cmn:FileTime>
  </snx:ControlFileHeader>
  <snx:MessageBody>
    <cmn:CountryDrugCode type="US_NDC542">05552-5500-10</cmn:CountryDrugCode>
```

```

<cmn:LotNumber>LOT17</cmn:LotNumber>
<snx:ProductionQuantity>
  <cmn:CompanyPrefix>038522</cmn:CompanyPrefix>
  <cmn:PackagingLevel>EA</cmn:PackagingLevel>
  <cmn:QuantityReported>10000</cmn:QuantityReported>
</snx:ProductionQuantity>
</snx:MessageBody>
</snx:SNXEndOfBatchMessage>

```

## Errors

| Data Element                            | Error Message                                                                                                                                                                                                                                                                                                                                      | Description                                                                                         |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Class 1 Errors</b>                   |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                     |
| snx:MessageBody   <b>choice1</b>        | Either internal material code or country drug code is required !!!                                                                                                                                                                                                                                                                                 | The error occurs if both InternalMaterialCode and CountryDrugCode are empty or null.                |
| cmn:CountryDrugCode   <b>@type</b>      | Country drug code type is required if country drug code is populated !!!                                                                                                                                                                                                                                                                           | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| cmn:LotNumber                           | Lot number is required !!!                                                                                                                                                                                                                                                                                                                         | The error occurs if the source is empty or null.                                                    |
| cmn:ProductionQuantity   <b>choice1</b> | Either packaging item code or company prefix is required !!!                                                                                                                                                                                                                                                                                       | The error occurs if both cmn:CompanyPrefix and the source are empty or null.                        |
|                                         | Only one of packaging item code or company prefix is required !!!                                                                                                                                                                                                                                                                                  | The error occurs if both cmn:CompanyPrefix and the source are populated.                            |
| cmn:PackagingItemCode   <b>@type</b>    | Packaging item code type required if packaging item code is populated !!!                                                                                                                                                                                                                                                                          | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| cmn:PackagingLevel                      | Valid packaging level is required !!!                                                                                                                                                                                                                                                                                                              | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
|                                         | At least one packaging level EA is required !!!                                                                                                                                                                                                                                                                                                    | The error occurs if the source does not contain at least one Packaging Level Each (EA).             |
| cmn:QuantityReported                    | Quantity report for packaging level EA is required !!!                                                                                                                                                                                                                                                                                             | The error occurs if PackagingLevel = EA, but source is empty or null.                               |
| <b>Class 2 Errors</b>                   |                                                                                                                                                                                                                                                                                                                                                    |                                                                                                     |
| cmn:PackagingLevel                      | (Processing Code 400): End of Batch transaction processing failed because Serial number quantity for packaging level EACH is missing for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location] | The error occurs if quantities are not reported at the "each" level.                                |

| Data Element                                                                                              | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cmn:QuantityReported in relation to commission data in the TraceLink system                               | (Processing Code 400): End of Batch transaction processing failed due to serial number quantity verification failure. [Quantity of commissioned serial number] at [packaging level] level found in the system but End of Batch message reported higher quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]. | The error occurs if the quantity of commissioned serial numbers in the End of Batch is more than the quantity in the TraceLink system.<br><br><div>  The system first parks/retries the End of Batch message to accommodate scenarios where Serial Number Exchange Disposition Assigned transmissions are still under process, or if they have not yet arrived. If the discrepancy still exists after the park/retry, the error occurs. </div> |
|                                                                                                           | (Processing Code 400): End of Batch transaction processing failed due to serial number quantity verification failure. [quantity of commissioned serial number] at [packaging level] level found in the system but End of Batch message reported lower quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]   | The error occurs if the quantity of commissioned serial numbers in the End of Batch is less than the quantity in the TraceLink system.                                                                                                                                                                                                                                                                                                                                                                                            |
| cmn:QuantityReported in relation to the batch yield threshold settings configured in Product Master Data. | (Processing Code 400): End of Batch transaction processing failed due to serial number quantity verification failure. [quantity of commissioned serial number] at [packaging level] level found in the system but End of Batch message reported lower quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]   | The error occurs if the reported quantity of serial numbers in the End of Batch is below the batch yield threshold set in Product Master Data.                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                           | (Processing Code 400): End of Batch transaction processing failed due to batch yield verification failure. [quantity of commissioned serial number at EACH packaging level] at end of Batch fell below Minimum Batch Yield [MinimumYield ]% ([MinimumYield in quantity] ) for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]           | The error occurs if the commissioned serial number quantity in the End of Batch is less than the minimum batch yield threshold setting in Product Master Data.                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                           | (Processing Code 400): End of Batch transaction processing failed due to batch yield verification failure. [quantity of commissioned serial number at EACH packaging level] at end of Batch is above Maximum Batch Size ([MaxBatchSize] ) for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]                                           | The error occurs if the commissioned serial number quantity in the End of Batch is more than the maximum batch size setting in Product Master Data.                                                                                                                                                                                                                                                                                                                                                                               |
| cmn:QuantityReported                                                                                      | (Processing Code 400): End of Batch transaction processing failed because Serial number quantity for packaging level EACH is missing for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code]                                                                                                                                                                                     | The error occurs if quantities are not reported at the "each" level.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Data Element                                                                                                                                                                                                                                                                                                                                                     | Error Message                        | Description |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|
|                                                                                                                                                                                                                                                                                                                                                                  | [packaging code /type] at [location] |             |
| Also see the <i>Settings &gt; Serial Number Exchange Online Help</i> for a list of success and failure email notifications regarding End of Batch. Users must opt into these notifications to receive them. Also see <i>Serial Number Exchange Online Help</i> for additional success and warning messages found in Info Exchange and Serial Number Exchange UI. |                                      |             |
| <b>Class 3 Errors</b>                                                                                                                                                                                                                                                                                                                                            |                                      |             |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered.                                                                                                                                                                                                |                                      |             |

## End of Batch Event (EPCIS v1.2)

### Guidelines

CMOs use this message to declare an End of Batch on behalf of the product's MAH, which records the End of Batch in the MAH's system and sends commission and aggregation data to the system. This message communicates Commission, Aggregation, and End of Batch data from the CMO to the MAH.

**Message Type:** SOM\_END\_OF\_BATCH\_EVENT

**Info Exchange Display Name:** End of Batch Event

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type | Description                                  |
|---------------------|---------------|------|----------------------------------------------|
| epcis:EPCISDocument | 1...1         | -    | <b>Required.</b> EPCIS message root element. |

| Data Element                        |  |  |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------|--|--|--|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| @schemaVersion                      |  |  |  | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| @creationDate                       |  |  |  | 1...1<br>1/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the Z to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the Z. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EPCISHeader                         |  |  |  | 0...1<br>-    | -        | <b>Required.</b> The XML file control header. The following use cases are supported in this message: <ol style="list-style-type: none"> <li>1. Commission or Transformation + Aggregation + End of Batch events: No Decommission/Destroy reported.</li> <li>2. Commission or Transformation + End of Batch events: Product is not aggregated and no Decommission/Destroy reported.</li> <li>3. Commission or Transformation + End of Batch + Decommission/Destroy events: Product is not aggregated. Decommission and/or destroy events recorded.</li> </ol> <div> <i>ⓘ</i> Commissioning or Transformation and End of Batch events are mandatory, all other events are optional.         </div> |
| sbdh:StandardBusinessDocumentHeader |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| sbdh:HeaderVersion                  |  |  |  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| sbdh:Sender                         |  |  |  | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| sbdh:Identifier                     |  |  |  | 1...1<br>1/*  | String   | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>4</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example: <ul style="list-style-type: none"> <li>• urn:epc:id:sgln:088202.867701.0</li> <li>• http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <div> <i>ⓘ</i> GLN will not have a urn/http prefix.         </div>                                                                                                                                                                                                                                                      |

<sup>1</sup>1.2<sup>2</sup>2017-05-19T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507

| Data Element |  |  |                             |            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|-----------------------------|------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |            |               |        | See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.<br><br>Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                       |
|              |  |  |                             | @Authority | 1...1<br>1/*  | String | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>1</sup><br>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.                                                                                                                                                                                                                              |
|              |  |  | sbdh:Receiver               |            | 1...*<br>-    | -      | <b>Required.</b> A unique identification key for the Receiver party of the message, representing the organization that created the standard business document. The <b>sbdh:Receiver</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                       |
|              |  |  | sbdh:Identifier             |            | 1...1<br>1/*  | String | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>2</sup><br>SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example: <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li><a href="#">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <div> <i>i</i> GLN will not have a urn/http prefix. </div> See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values. |
|              |  |  | @Authority                  |            | 1...1<br>1/*  | String | The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>3</sup><br>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.                                                                                                                                                                                                                                               |
|              |  |  | sbdh:DocumentIdentification |            | 1...1<br>-    | -      | <b>Required.</b><br>Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | sbdh:Standard               |            | 1...1<br>0/*  | String | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | sbdh:TypeVersion            |            | 1...1<br>0/*  | String | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a> . <sup>5</sup>                                                                                                                                                                                                                                                                              |

<sup>1</sup>GLN<sup>2</sup>0614141123452<sup>3</sup>GLN<sup>4</sup>EPCglobal<sup>5</sup>1.0

| Data Element |  |  |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--------------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>1</sup>                                                                                                                                                                                               |
|              |  |  | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> The type of the document. The <b>sbdh:Type</b> value must be set to <b>Events</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                     |
|              |  |  | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>3</sup>                                                                                                                                         |
|              |  |  | extension                | 0...1<br>-    | -        | Header extension area with master data attributes.                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | EPCISMasterData          | 0...1<br>-    | -        | Master data extension header. May contain product master data attributes for Commissioning event and/or location address information for Decommissioning and/or Destroy events. Optional.<br><br><div> <i>i</i> Full GS1-conformance requires that all product and party master data be stored in the EPCIS header extension EPCISMasterData   VocabularyList   Vocabulary   VocabularyElementList   <b>VocabularyElement</b>. </div> |
|              |  |  | VocabularyList           | 1...1<br>-    | -        | <b>Required.</b> Vocabulary list group master data elements.                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | Vocabulary               | 0...*<br>-    | -        | Looping vocabulary element with discrete item master data element groups. <b>Vocabulary</b> will occur only once for all item master entries present in message, if group is populated. Group is optional. If it does not appear in master data header extension, no error will be thrown.                                                                                                                                            |
|              |  |  | @type                    | 1...1<br>0/*  | String   | <b>Required.</b> Vocabulary type identifying product master data elements. Product master data is defined by VocabularyElement   @id.<br>Valid value: <b>urn:epcglobal:epcis:vtype:EPCClass</b> = product master data. <sup>4</sup>                                                                                                                                                                                                   |
|              |  |  | VocabularyElementList    | 0...1<br>-    | -        | List of vocabulary elements containing master data attributes for each unique product code.                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | VocabularyElement        | 0...*<br>-    | -        | Looping vocabulary element identifying each unique SGTIN, or NTIN for product master data embedded in the epc serial number in the Commissioning and Transformation events.                                                                                                                                                                                                                                                           |

<sup>1</sup>201705191745200001<sup>2</sup>Events<sup>3</sup>2017-05-12T22:08:02Z<sup>4</sup>urn:epcglobal:epcis:vtype:EPCClass



| Data Element |  |  |  |  |  |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|--|--|--------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |              |               |        | SSCC codes not included in <b>VocabularyElement</b> product master data.<br><br><div> <i>①</i> To conform with GS1 standards, master data attributes should be sent in the VocabularyElement. Each unique SGTIN, NTIN, or China Product Code embedded in Commissioning event epcList   <b>epc</b> should be sent in one instance of <b>VocabularyElement</b>. </div>                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies the product code for which master data is being sent in the <b>VocabularyElement</b> loop.<sup>1</sup> VocabularyElement   @id = SGTIN, or NTIN with GS1-conformant urn or http prefix. These are the only values supported in this element. All other product identifier types will be sent as additional trade item types. SSCC codes are not identified in any part of the <b>VocabularyElement</b> group.</p> <p>Must match the product code embedded within the serial number in the epc code in one or more commissioning events. SGTIN (strongly recommended for GS1 conformance)</p> <ul style="list-style-type: none"> <li>Prefix: <code>urn:epc:idpat:sgtin:</code></li> <li>Example: <code>urn:epc:idpat:sgtin:0030001.0012345.*</code></li> </ul> |
|              |  |  |  |  |  |  | attribute(1) | 1...1<br>1/*  | String | <p><b>Conditionally required</b> if master data attributes were sent in <b>VocabularyElement</b>. Instance 1 of attribute for packaging level value identified by @id attribute.<sup>2</sup></p> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <p><b>Required.</b> Attribute identifying packaging level.</p> <p>Valid value: <code>http://epcis.tracelink.com/mda/packageTypeCode</code><sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  |  | attribute(2) | 0...1<br>0/*  | String | <p>Instance 2 of attribute for internal material number in Pharmaceutical Manufacturer's internal system identified by @id attribute. Identified by the value in the next attribute element in the current loop = <code>MANUFACTURER_PART_NUMBER</code>.<sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying internal material code.</p> <p>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code><sup>5</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  |  | attribute(3) | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute(2)   @id is populated. Instance 3 of attribute for internal material number identifier type for the product. Id attribute identifying internal material code.</p> <p>Valid value: <code>MANUFACTURER_PART_NUMBER</code><sup>6</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>urn:epc:idpat:sgtin:0030001.0012345.\*<sup>2</sup>UN<sup>3</sup>http://epcis.tracelink.com/mda/packageTypeCode<sup>4</sup>100335<sup>5</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification<sup>6</sup>MANUFACTURER\_PART\_NUMBER

| Data Element |  |  |  |  |  |  |  |              |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--|--|--|--------------|--|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  |              |  |               |        | <p>Sequence of fields for internal material number is:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;100335&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;MANUFACTURER_PART_NUMBER&lt;/attribute&gt;</code></li> </ol> <div>  If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown. </div>          |
|              |  |  |  |  |  |  |  | @id          |  | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying internal material code.<br/>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code><sup>1</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  |  |  | attribute(4) |  | 0...1<br>0/*  | String | <p>Instance 4 of attribute for country drug code for all national drug code types, identified by the enum value in the next attribute element in the current loop and by the attribute @id value as an additional trade item.<sup>2</sup><br/>Country drug code type defined by value in next sequential attribute element where attribute   @id = <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code> OR <code>http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</code></p>                                                                                                                                                    |
|              |  |  |  |  |  |  |  | @id          |  | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying country drug code.<br/>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code><sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  |  | attribute(5) |  | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute(4)   @id is populated with the country drug code value.<br/>Instance 5 of attribute for Country drug code identifier type. Must follow attribute with country drug value. Id attribute identifying internal material code.<sup>4</sup><br/>Sequence of fields for country drug code is:<br/>GS1:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;FDA_NDC_</code></li> </ol> |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode<sup>2</sup>82025030221<sup>3</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification<sup>4</sup>FDA\_NDC\_11

| Data Element |  |  |  |  |  |  |  |     |            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|--|--|--|--|-----|------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  |     |            |               |        | <pre>11&lt;/attribute&gt;</pre> <p>TraceLink:</p> <ol style="list-style-type: none"> <li><pre>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</pre></li> <li><pre>&lt;attribute id="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode"&gt;US_NDC442&lt;/attribute&gt;</pre></li> </ol> <div>  If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown. </div> <p>The following qualifiers have been defined by GS1 as additional trade item types:</p> <ul style="list-style-type: none"> <li><b>MANUFACTURER_PART_NUMBER</b> = Internal material number</li> <li><b>FDA_NDC_11</b> = US NDC542</li> <li><b>DIN</b> = Canada Drug ID Number</li> <li><b>PHARMACODE_CH</b> = Swiss Pharma Code</li> <li><b>NAN</b> = Nordic Article Number</li> </ul> <p>To identify these material number types, use attribute   <b>@id</b> string:<br/> <pre>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode.</pre> </p> <p>For all other country drug code types, use attribute   <b>@id</b> string:<br/> <pre>http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode.</pre> </p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  |  |  | @id |            | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying internal material code. Valid value:<sup>1</sup></p> <ul style="list-style-type: none"> <li><pre>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</pre> (GS1 enums).</li> <li><pre>http://epcis.tracelink.com/mda/packageTypeCode</pre> (TraceLink enums).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  |  |     | Vocabulary | 0...*<br>-    |        | <p>Looping vocabulary with discrete master data element groups. <b>Vocabulary</b> will occur once each for sold from, ship from, sold to, and ship to parties.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification

| Data Element |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|--|-----------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                       |               |        |  Group is optional. If it does not appear in master data header extension, no error will be thrown.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | @type                 | 1...1<br>0/*  | String | <p><b>Required.</b> Vocabulary type identifying location master data elements. Master data type defined by VocabularyElement   @id. Valid value:<sup>1</sup></p> <ul style="list-style-type: none"> <li><code>urn:epcglobal:epcis:vtype:Location</code> = location master data</li> </ul> <p> Location address info for Decommissioning and/or Destroying events should be sent in header master data.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | VocabularyElementList | 0...1<br>-    | -      | List of vocabulary elements that includes all location master information. Location party identifiers and address info are stored in instances of the looping group <b>VocabularyElement</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | VocabularyElement     | 1...*<br>-    | -      | <p><b>Required.</b> Looping group header for data elements that identify all location master data, including identifiers, identifier types, and address info. <b>VocabularyElement</b> repeats once for each party type:</p> <p>Decommission/Destroy Event:</p> <ul style="list-style-type: none"> <li>Location party (optional).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | @id                   | 1...1<br>0/*  | String | <p><b>Required.</b> SGLN or other partner identifier and type for party master data in <b>VocabularyElement</b>. Must match <b>sourceList</b> or <b>destinationList</b> owning or location party in shipping event from:<sup>2</sup></p> <ul style="list-style-type: none"> <li>ObjectEvent   extension   sourceList   <b>source</b> (transfer from, carrier) OR</li> <li>ObjectEvent   extension   destinationList   <b>destination</b> (transfer to)</li> </ul> <p>For Decommissioning and Destroying event, must match location party identifier in: ObjectEvent   readPoint   <b>id</b></p> <p>The identifier value is mandatory for regulatory reporting. The identifier type must include a valid urn or http string prefix. Valid prefix formats include by namespace:</p> <ul style="list-style-type: none"> <li>GS1: <code>urn:epc:id:sgln:[CompanyPrefix].[LocationReference].[Extension]</code></li> <li>GS1 USHC: <code>http://epcis.gs1us.org/hc/[identifierType]/loc/[identificationValue]</code></li> <li>TraceLink: <code>http://epcis.tracelink.com/hc/[identifierType]/loc/[identificationValue]</code></li> </ul> <p>Only SGLN is supported—not GLN. Different countries require different values as noted below:</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |

<sup>1</sup>urn:epcglobal:epcis:vtype:Location<sup>2</sup>urn:epc:id:sgln:088202.867701.0

| Data Element |  |  |  |  |  |  |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|--|--|--------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  | attribute(1) | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute(2)</b> is present. Looping Name/Value pairs identifying partner address master data elements. This is the value element in the Name/Value pair attribute   <b>@id</b>. Stores master data item value defined by <b>@id</b>.<sup>1</sup> Partner master data items currently supported for shipping event:</p> <ul style="list-style-type: none"> <li>• Business name - Mandatory if address populated in <b>VocabularyElement</b>.</li> <li>• Business classification - Optional.</li> <li>• Street address 1 - Mandatory if address populated.</li> <li>• Street address 2 - Optional.</li> <li>• City - Required if address populated.</li> <li>• District - Optional</li> <li>• State/Province/Region - Mandatory if address populated.</li> <li>• Postal code - Optional.</li> <li>• Country code - Required if address populated.</li> </ul>                                             |
|              |  |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute(1)</b> is populated. The name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using urn or http prefix. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>• <code>urn:epcglobal:cbv:mda#name</code></li> <li>• <code>urn:epcglobal:cbv:mda#streetAddressOne</code></li> <li>• <code>urn:epcglobal:cbv:mda#streetAddressTwo</code></li> <li>• <code>urn:epcglobal:cbv:mda#streetAddressThree</code></li> <li>• <code>urn:epcglobal:cbv:mda#state</code></li> <li>• <code>urn:epcglobal:cbv:mda#postalCode</code></li> <li>• <code>urn:epcglobal:cbv:mda#countryCode</code></li> <li>• <code>http://epcis.tracelink.com/mda/AddressObjectGUID</code></li> <li>• <code>http://epcis.tracelink.com/mda/HouseGUID</code></li> <li>• <code>http://epcis.tracelink.com/mda/partyRoleCode</code></li> </ul> |
|              |  |  |  |  |  |  |  | attribute(2) | 0...*         | String | <b>Conditionally required</b> if <b>attribute(1)</b> is present. Looping Name/Value pairs identifying additional party identifier elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>Kendall Pharma<sup>2</sup>urn:epcglobal:cbv:mda#name

| Data Element |           |  |  |  |  |  |  |     |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|-----------|--|--|--|--|--|--|-----|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |  |  |  |  |  |  |     |  |               |        | <p>. Stores additional party identifiers and identifier types defined by <b>@id</b>.<sup>1</sup><br/>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>• Additional party identifier -- Optional (1 or more supported)</li> <li>• Additional party identifier type -- Optional (1 or more supported)</li> </ul> <p>Create one instance of the Name/Value pair attribute   <b>@id</b> for each master data element returned.</p> <p>Additional party identifiers must be sent in a double attribute combination. The sequence must be:</p> <ul style="list-style-type: none"> <li>• Attribute 1 identifies and provides the party identifier value.</li> <li>• Attribute 2 identifies the party identifier type.</li> </ul> <p>For example:</p> <pre>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue"&gt;10023141&lt;/at tribute&gt; &lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode"&gt;DUNS_PLUS_ FOUR&lt;/attribute&gt;</pre> <div>  If this sequence of double attributes is not followed for additional party identifiers, the additional party identifier will not be mapped to the TraceLink system and no error will be thrown. </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |           |  |  |  |  |  |  | @id |  | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute(2)</b> is populated. The name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using urn or http prefix. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>• <a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</a></li> <li>• <a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| EPCISBody    |           |  |  |  |  |  |  |     |  | 1...1<br>-    | -      | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              | EventList |  |  |  |  |  |  |     |  | 1...1<br>-    | -      | <p><b>Required.</b> The <b>EventList</b> includes the following events:</p> <ul style="list-style-type: none"> <li>• <b>ObjectEvent</b> - 0 or more for Commissioning (Conditional, Commission, or Transformation is mandatory).</li> <li>• <b>ObjectEvent</b> - 0 or more for Decommissioning.</li> <li>• <b>ObjectEvent</b> - 0 or more for Destroying.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>10023141<sup>2</sup><http://epcis.tracelink.com/mda/additionalPartyIdentificationValue>

| Data Element |  |                     |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|---------------------|--|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                     |  |               |          | <ul style="list-style-type: none"> <li>• <b>AggregationEvent</b> - 0 or more for Aggregation.</li> <li>• <b>ObjectEvent</b> - 1 for End of Batch.</li> <li>• <b>TransformationEvent</b> - 0 or more for Transformation (Conditional, Commission, or Transformation is mandatory).</li> </ul> <p>The order of events is not enforced.</p>                                                                                                                                                         |
|              |  | choice%1            |  | 1...*<br>-    | -        | <p><b>Required.</b> Only one of the following choice options may be selected in any one loop on EPCISBody   <b>EventList</b>:</p> <ul style="list-style-type: none"> <li>• <b>ObjectEvent</b> with commissioning extensions</li> <li>• <b>ObjectEvent</b> with decommissioning extensions</li> <li>• <b>ObjectEvent</b> with destroying extensions</li> <li>• <b>AggregationEvent</b></li> <li>• <b>ObjectEvent</b> with End of Batch extension</li> <li>• <b>TransformationEvent</b></li> </ul> |
|              |  | ObjectEvent         |  | 1...*<br>-    | -        | <p><b>Required.</b> Choice 1 for <b>EventList</b>. Data = <b>ObjectEvent</b> for the Commissioning Events<br/> <b>EventList</b> = <b>ObjectEvent</b> Commissioning when:</p> <ul style="list-style-type: none"> <li>• <b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:commissioning</code></li> <li>• <b>action</b> = <code>ADD</code></li> <li>• <b>disposition</b> = <code>urn:epcglobal:cbv:disp:active</code></li> </ul>                                                                    |
|              |  | eventTime           |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  | recordTime          |  | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  | eventTimeZoneOffset |  | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with the choice made for <b>eventTime</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                  |
|              |  | epcList             |  | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>2017-05-19T22:08:02Z<sup>2</sup>-04:00

| Data Element |  |  |  |             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|-------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | epc         | 1...*<br>1/*  | String | <p><b>Required.</b> The EPC identifier in EPC Pure Identity URI format:<sup>1</sup></p> <p>SGTIN Format:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</li> <li>Ex: urn:epc:id:sgtin:068202.0401034.11220207026272</li> </ul> <p>SSCC Format:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</li> <li>Ex: urn:epc:id:sscc:030944.10105363280</li> </ul> |
|              |  |  |  | action      | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must be set to <b>ADD</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | bizStep     | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must be set to urn:epcglobal:cbv:bizstep:commissioning. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | disposition | 0...1<br>0/*  | AnyURI | The <b>disposition</b> value must be set to urn:epcglobal:cbv:disp:active. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | readPoint   | 0...1<br>-    | -      | <p>The location where the commissioning event occurred.</p> <div>  To represent the facility where the commissioning event occurred, only use the SGLN representation. If no subLocation, third segment = 0. </div> <p>Read point is optional in commissioning event.</p>                                                                                                                                                                            |
|              |  |  |  | id          | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | extension   | 0...1         | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>urn:epc:id:sgtin:088202.5503022.1000000000670

urn:epc:id:sscc:088202.002000000034

http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943

http://epcis.tracelink.com/obj/ntin/4150.001647778.1000000000002

<sup>2</sup>ADD<sup>3</sup>urn:epcglobal:cbv:bizstep:commissioning<sup>4</sup>urn:epcglobal:cbv:disp:active<sup>5</sup>urn:epc:id:sgln:0614141.12345.RP1



| Data Element |  |  |  |  |                              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|------------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                              |               |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | bizLocation                  | 0...1<br>-    | -      | <b>Conditionally required</b> for a commissioning event. The location where the event occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | id                           | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  | bizTransactionList           | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  | extension                    | 0...1         | -      | Main extension body for commission event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  | ilmd                         | 0...1<br>-    | -      | Instance lot master data specific to product being commissioned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | cbvmdata:lotNumber           | 0...1<br>0/*  | String | The lot or batch code for the serialized item in an alphanumeric string of up to 20 characters. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | cbvmdata:itemExpirationDate  | 0...1<br>0/*  | Date   | The expiration date for the serialized item, in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | tl:commissionEventExtensions | 0...1<br>-    | -      | Extensions used for Commission <b>ObjectEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:filterValue               | 0...1<br>-    | Int    | Only use if it is required by a trade partner to convert SSCC to GS1 HEX or Tag URI format. See the <a href="#">FilterValue</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | tl:packagingLevel            | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>packagingLevel</b> is not included in the commissioning event extensions. The packaging level of the commissioned item using the supported enumeration values.<sup>4</sup></p> <div> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. homogenous pallet).</p> </div> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p> |
|              |  |  |  |  | tl:epcAttributes             | 0...*         | -      | Supports optional inclusion of human readable barcode content associated with each epc number in a commission event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>urn:epc:id:sgln:0614141.12345.1400<sup>2</sup>ABC123<sup>3</sup>2020-12-31<sup>4</sup>EA

| Data Element |  |  |  |  |  |                         |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--|--|-------------------------|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                         |  |               |        | Included only if provided in original commission event.                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | @epc                    |  | 1...1<br>1/*  | String | <b>Required.</b> The EPC serial number to which <b>tl:barcodeContent</b> is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5]: <sup>1</sup> <ul style="list-style-type: none"> <li>Item: SGTIN</li> <li>Case: SGTIN or SSCC</li> <li>Pallet: SSCC.</li> </ul> |
|              |  |  |  |  |  | tl:barcodeContent       |  | 1...1<br>1/*  | String | <b>Required.</b> The human readable barcode contents encoded in the 2D barcode with parentheses for the AI keys. <sup>2</sup>                                                                                                                                                                          |
|              |  |  |  |  |  | tl:plantLocationId      |  | 0...1<br>0/*  | String | Identifier of plant where products were commissioned. <sup>3</sup>                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | tl:productionLineId     |  | 0...1<br>1/*  | String | Identifier of production line where products were commissioned. <sup>4</sup>                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:lineManagerName      |  | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products. <sup>5</sup>                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:companyPrefix        |  | 0...1<br>0/*  | String | Not used.                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:internalMaterialCode |  | 0...1<br>0/*  | String | Internal material number for the product in the Pharmaceutical Manufacturer's internal systems (e.g. ERP). <sup>6</sup>                                                                                                                                                                                |
|              |  |  |  |  |  | tl:packagingItemCode    |  | 0...1<br>0/*  | String | The product code for the commissioned item (e.g. GTIN-14). <sup>7</sup>                                                                                                                                                                                                                                |
|              |  |  |  |  |  | @type                   |  | 1...1<br>1/*  | String | <b>Required.</b> Valid values: <sup>8</sup>                                                                                                                                                                                                                                                            |

<sup>1</sup>urn:epc:id:sgtin:068202.0401034.11220207026272<sup>2</sup>(01)50682020401034(21)11220207026272(17)170731(10)A312101(7004)0120<sup>3</sup>0614141.12345.1400<sup>4</sup>PW003<sup>5</sup>John Smith<sup>6</sup>100234<sup>7</sup>50300694220667<sup>8</sup>GTIN-14

| Data Element |  |  |  |  |  |                          |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|--|--|--------------------------|--|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                          |  |               |        | <ul style="list-style-type: none"> <li>• <a href="#">GTIN-14</a></li> <li>• <a href="#">NTIN</a></li> </ul>                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:countryDrugCode       |  | 0...1<br>0/*  | String | <p>The national drug code for the commissioned item (e.g. NDC number for US products).<sup>1</sup></p> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p>                                                                                                            |
|              |  |  |  |  |  | @type                    |  | 0...1<br>0/*  | String | <p>The national drug code type using the supported enumeration values and any formatting instructions provided.<sup>2</sup></p> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | tl:manufacturingDate     |  | 0...1<br>0/10 | Date   | The date of manufacture for the serialized item, in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:countryMarket         |  | 0...1<br>0/3  | String | The 2-letter ISO code for the country market for which the product was manufactured. <sup>4</sup>                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | tl:printedExpirationDate |  | 0...1<br>0/*  | String | Formatted batch expiration date as per the market requirements as it appears printed on the package. <sup>5</sup>                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | tl:referenceDocuments    |  | 0...1<br>0/*  | -      | Reference document identifier associated with the commissioning activity.                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:poNumber              |  | 0...1<br>0/*  | String | PO number associated with the serial number. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:poLine                |  | 0...1         | String | PO line number. <sup>7</sup>                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>0069-4220-66<sup>2</sup>FDA\_NDC\_11<sup>3</sup>2017-05-19<sup>4</sup>US<sup>5</sup>2019-03-31<sup>6</sup>1001764<sup>7</sup>000010

| Data Element |  |  |  |  |  |  |                        | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|--|--|--|------------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:workOrderNumber     | 0...1<br>0/*  | String   | Work order number associated with the serial number. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | tl:referenceIdentifier | 0...1<br>0/*  | String   | Reference identifier associated with the serial number. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  |  | tl:extensionField      | 0...*<br>-    | -        | <p>Extension point to pass in one or more name/value pairs containing additional data attributes not already supported in this message. If this element group is populated, both <b>tl:fieldName</b> and <b>tl:fieldValue</b> must be populated.</p> <p> These extensions are not stored by TraceLink. They are used only for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message, such as when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer. Different trade partners may have different field requirements and may therefore require that the <b>tl:extensionField</b> be populated differently per trade partner.</p> |
|              |  |  |  |  |  |  | tl:fieldName           | 1...1<br>1/*  | String   | <b>Required.</b> The field name provided by the trade partner receiving the mapped outbound message. The field name must match the field name provided by the trade partner exactly - including case - so that it is properly detected in the outbound mapping.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | tl:fieldValue          | 1...1<br>1/*  | String   | <b>Required.</b> The field value content that corresponds to <b>tl:fieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  |  | ObjectEvent            | 0...*<br>-    | -        | <p><b>ObjectEvent</b> describing decommissioning events.</p> <p><b>EventList = ObjectEvent</b> Decommissioning when all of the following is true:</p> <ul style="list-style-type: none"> <li>• <b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:decommissioning</code></li> <li>• <b>action</b> = <code>DELETE</code></li> <li>• <b>disposition</b> = <code>urn:epcglobal:cbv:disp:inactive</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  |  | eventTime              | 1...*<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mmZ format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | eventTimeZoneOffset    | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with the choice made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>1001764-00<sup>2</sup>A100352<sup>3</sup>2017-05-19T08:30:21.32Z<sup>4</sup>-04:00

| Data Element |  |  |             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|-------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | epcList     | 1...1<br>-    | -      | <b>Required.</b> The EPCs of each item, case, and/or pallet decommissioned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | epc         | 1...*<br>1/*  | String | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. <sup>1</sup><br>SGTIN Format: <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>• Ex: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> SSCC Format: <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</code></li> <li>• Ex: <code>urn:epc:id:sscc:030944.10105363280</code></li> </ul> |
|              |  |  | action      | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must be set to <code>DELETE</code> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | bizStep     | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must be set to <code>urn:epcglobal:cbv:bizstep:decommissioning</code> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | disposition | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must be set to <code>urn:epcglobal:cbv:disp:inactive</code> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | readPoint   | 0...1<br>-    | -      | <b>Required.</b> Location where the event occurred. Defined with GS1-conformant party identifier types with full urn or http prefix. SGLN is strongly preferred. Links to the location party address data if present in the VocabularyElement I @id.                                                                                                                                                                                                                                                                                                                              |
|              |  |  | id          | 1...1<br>0/*  | AnyURI | <b>Required.</b> The party identifier of the location where the decommissioning event occurred. SGLN is strongly preferred for GS1 conformance. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup><br>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                                                                                                                                                                                                                                                             |
|              |  |  | bizLocation | 1...1<br>-    | -      | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>urn:epc:id:sgtin:068202.0401034.11220207026272

urn:epc:id:sscc:030944.10105363280

http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943

<sup>2</sup>DELETE<sup>3</sup>urn:epcglobal:cbv:bizstep:decommissioning<sup>4</sup>urn:epcglobal:cbv:disp:inactive<sup>5</sup>urn:epc:id:sgln:0614141.12345.1400

| Data Element |  |  |  |                                | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--------------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | id                             | 1...1<br>1/*  | AnyURI | The SGLN EPC of the location where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier.                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | bizTransactionList             | 0...1<br>-    | -      | <b>Required.</b> Business transaction list group.                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | bizTransaction                 | 1...*<br>0/*  | AnyURI | <b>Required.</b> The transaction identifier associated with the decommissioned product. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | @type                          | 1...1<br>1/1  | String | <b>Required.</b> The transaction identifier type.<br>Valid values: <sup>2</sup> <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul>                 |
|              |  |  |  | @date                          | 0...1<br>0/*  | Date   | <b>Required.</b> Transaction identifier date attribute in YYYY-MM-DD XML date format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:locationId                  | 0...1<br>-    | String | Serialized Operations Manager External Partner Location identifier. Type of identifier defined by <b>@type</b> . When messages are submitted by an external Serialized Operations Manager Partner, the system uses the subscriber company integration user to perform the action and log this in the audit trail so that all messages executed by the external Serialized Operations Manager Partner are attributed to that company. <sup>4</sup> |
|              |  |  |  | @type                          | 1...1<br>1/*  | String | <b>Required.</b> Attribute that identifies the location types. <sup>5</sup><br>See the <a href="#">MessagePartyIDType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                      |
|              |  |  |  | tl:decommissionEventExtensions | 0...1<br>-    | -      | Extensions used for <b>ObjectEvent</b> Decommissioning.                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:transactionDate             | 0...1<br>0/*  | Date   | Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>6</sup>                                                                                                                                                                                                                                                             |

<sup>1</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016<sup>2</sup><http://epcis.tracelink.com/hc/btt/removal><sup>3</sup>2019-04-01<sup>4</sup>8888882028677<sup>5</sup>GLN<sup>6</sup>2017-05-19

| Data Element |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|---------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:disaggregateFromParent | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs back end to disaggregate a serial number from its parent container (if it is aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> . <sup>1</sup><br>If not set, or set to <b>false</b> , the back end operates in default mode, which generates an error when attempting to change the status of a serial number aggregated to a parent container.<br>If source is not populated, target defaults to <b>false</b> . |
|              |  |  |  | tl:marketCountryCode      | 0...1<br>0/2  | String  | Market country code. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:businessPartyInfo      | 0...1<br>-    | -       | Address for the party authorizing the decommissioning event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:businessId             | 0...*<br>0/*  | String  | The identifier associated with the authorizing business entity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | @type                     | 0...1<br>0/*  | String  | The type of the <b>BusinessId</b> identifier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | tl:businessClassification | 0...1<br>0/*  | String  | The classification of the business.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -       | Populated with the business name and address of the sold from or transfer from business entity.                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | tl:businessName           | 0...1<br>0/*  | String  | The business name of the trading partner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:street1                | 0...1<br>0/*  | String  | The first line of the street address.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:street2                | 0...1<br>0/*  | String  | The second line of the street address.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | tl:city                   | 0...1<br>0/*  | String  | The city.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:village                | 0...1<br>0/*  | String  | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>false<sup>2</sup>US

| Data Element |  |  |  |  |  |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:houseNumber         | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> .                               |
|              |  |  |  |  |  | tl:township            | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                     |
|              |  |  |  |  |  | tl:district            | 0...1<br>0/*  | String | District Code.<br><br> Must be a 3-digit numeric code.                                                                                                                                  |
|              |  |  |  |  |  | tl:stateOrRegion       | 0...1<br>0/*  | String | The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code.                                                                                                                                          |
|              |  |  |  |  |  | tl:postalCode          | 0...1<br>1/*  | String | The ZIP or other postal code.                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:country             | 0...1<br>0/*  | String | The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code.                                                                                                                                                                 |
|              |  |  |  |  |  | tl:corporateFax        | 0...1<br>1/*  | String | Company fax number.                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:addressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <sup>1</sup><br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F         |
|              |  |  |  |  |  | tl:houseGUID           | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS). <sup>2</sup><br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F |
|              |  |  |  |  |  | tl:taxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                    |
|              |  |  |  |  |  | tl:premisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                     |

<sup>1</sup>19406454-0022-000C-00B0-000000000152<sup>2</sup>986f2934-be05-438f-A30E-c15b90e15dbc



| Data Element |  |  |             |                           | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|-------------|---------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |             | tl:warehouseOperatorName  | 0...1<br>0/*  | String   | Name of the person responsible for warehouse operations. <sup>1</sup>                                                                                                                                                                                                                                                                                                            |
|              |  |  |             | tl:decommissionReasonCode | 0...1<br>0/*  | String   | Reason code for decommissioning. <sup>2</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                                                                                                                                                                                               |
|              |  |  |             | tl:destructionMethod      | 0...1<br>0/*  | String   | Destruction method of the product. <sup>3</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                                                                                                                                                                                                  |
|              |  |  |             | tl:reasonDescription      | 0...1<br>0/*  | String   | Description for decommission reason code. <sup>4</sup>                                                                                                                                                                                                                                                                                                                           |
|              |  |  | ObjectEvent |                           | 0...*<br>-    | -        | <b>ObjectEvent</b> recording destroying events.<br><b>EventList = ObjectEvent</b> Destroy when all of the following is true: <ul style="list-style-type: none"> <li>• <b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:destroying</code></li> <li>• <b>action</b> = <code>DELETE</code></li> <li>• <b>disposition</b> = <code>urn:epcglobal:cbv:disp:destroyed</code></li> </ul> |
|              |  |  |             | eventTime                 | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mmZ format. <sup>5</sup>                                                                                                                                                                                                                                                                  |
|              |  |  |             | eventTimeZoneOffset       | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with the choice made for <b>eventTime</b> . <sup>6</sup>                                                                                                                                                                                                                  |
|              |  |  |             | epcList                   | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                                                                                                                                                                                                                                        |
|              |  |  |             | epc                       | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. <sup>7</sup><br>SGTIN Format:                                                                                                                                                                                                                                                                               |

<sup>1</sup>John Smith<sup>2</sup>PRODUCTION\_DEFECT<sup>3</sup>LIQUID\_DILUTION\_DRAINAGE<sup>4</sup>Defect from production<sup>5</sup>2017-05-19T08:30:21.32Z<sup>6</sup>-04:00<sup>7</sup>urn:epc:id:sgtin:068202.0401034.11220207026272

urn:epc:id:sscc:030944.10105363280

http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943

| Data Element |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                    |               |        | <ul style="list-style-type: none"> <li>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</li> <li>Ex: urn:epc:id:sgtin:068202.0401034.11220207026272</li> </ul> <p>SSCC Format:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</li> <li>Ex: urn:epc:id:sscc:030944.10105363280</li> </ul> |
|              |  |  |  | action             | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must be set to <b>DELETE</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | bizStep            | 1...1<br>0/*  | AnyURI | The <b>bizStep</b> value must be set to <b>urn:epcglobal:cbv:bizstep:destroying</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | disposition        | 1...1<br>0/*  | AnyURI | The <b>disposition</b> value must be set to <b>urn:epcglobal:cbv:disp:destroyed</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | readPoint          | 0...1<br>-    | -      | <p>The location of where the commissioning event occurred.</p> <div> <p> To represent the facility where the commissioning event occurred, only use the SGLN representation. If no <b>subLocation</b>, third segment = 0.</p> </div>                                                                                                    |
|              |  |  |  | id                 | 1...1<br>0/*  | AnyURI | <p>The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier.<sup>4</sup></p> <p>See the <a href="#">MDPartyTypeReadpoint</a> enumeration list for valid values.</p>                                                                                                                                                                                |
|              |  |  |  | bizLocation        | 1...1<br>-    | -      | <b>Required.</b> The location where the event occurred.                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | id                 | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup>                                                                                                                                                                                                                                                            |
|              |  |  |  | bizTransactionList | 0...1         | -      | <b>Required.</b> Business transaction list group.                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>DELETE<sup>2</sup>urn:epcglobal:cbv:bizstep:destroying<sup>3</sup>urn:epcglobal:cbv:disp:destroyed<sup>4</sup>urn:epc:id:sgln:0614141.12345.1400<sup>5</sup>urn:epc:id:sgln:0614141.12345.1400

| Data Element |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|---------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizTransaction            | 1...*<br>0/*  | AnyURI  | <b>Required.</b> The transaction identifier associated with the destroyed product. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | @type                     | 1...1<br>1/1  | String  | <b>Required.</b> The transaction identifier type.<br>Valid values: <sup>2</sup> <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul>                                        |
|              |  |  |  | @date                     | 0...1<br>0/*  | Date    | <b>Required.</b> Transaction identifier date attribute in YYYY-MM-DD XML format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:locationId             | 0...1<br>-    | String  | Serialized Operations Manager External Partner Location identifier. Type of identifier defined by <b>@type</b> . When transactions are submitted by an external Serialized Operations Manager Partner, the system uses the partner company integration user to perform the action and log this in the audit trail so that all messages executed by the external Serialized Operations Manager Partner are attributed to that company. <sup>4</sup>                       |
|              |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b> Attribute that identifies the location types. <sup>5</sup><br>See the <a href="#">MessagePartyIDType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:destroyEventExtensions | 0...1<br>-    | -       | Extensions used for <b>ObjectEvent</b> Destroying.                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:transactionDate        | 0...1<br>0/*  | Date    | Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>6</sup>                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:disaggregateFromParent | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs back end to disaggregate a serial number from its parent container (if it is aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> . <sup>7</sup><br>If not set, or set to <b>false</b> , the back end operates in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container. |

<sup>1</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016<sup>2</sup><http://epcis.tracelink.com/hc/btt/removal><sup>3</sup>2019-04-01<sup>4</sup>8888882028677<sup>5</sup>GLN<sup>6</sup>2017-05-19<sup>7</sup>false

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                           |               |        | If source is not populated, target defaults to <code>false</code> .                                                                                                                                                                         |
|              |  |  |  |  | tl:marketCountryCode      | 0...1<br>0/2  | String | Market country code. <sup>1</sup>                                                                                                                                                                                                           |
|              |  |  |  |  | tl:businessPartyInfo      | 0...1<br>-    | -      | Address for the party authorizing the destroy event.                                                                                                                                                                                        |
|              |  |  |  |  | tl:businessId             | 0...<br>0/*   | String | <b>Required.</b> The identifier associated with authorizing from business entity.                                                                                                                                                           |
|              |  |  |  |  | @type                     | 0...1<br>0/*  | String | The type of the <b>BusinessId</b> identifier.                                                                                                                                                                                               |
|              |  |  |  |  | tl:businessClassification | 0...1<br>0/*  | String | The classification of the business.                                                                                                                                                                                                         |
|              |  |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -      | Populated with the business name and address of the sold from or transfer from business entity. Optional group.                                                                                                                             |
|              |  |  |  |  | tl:businessName           | 0...1<br>0/*  | String | The business name of the trading partner.                                                                                                                                                                                                   |
|              |  |  |  |  | tl:street1                | 0...1<br>0/*  | String | The first line of the street address.                                                                                                                                                                                                       |
|              |  |  |  |  | tl:street2                | 0...1<br>0/*  | String | The second line of the street address.                                                                                                                                                                                                      |
|              |  |  |  |  | tl:city                   | 0...1<br>0/*  | String | The city.                                                                                                                                                                                                                                   |
|              |  |  |  |  | tl:village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                        |
|              |  |  |  |  | tl:houseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> . |
|              |  |  |  |  | tl:township               | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                       |

<sup>1</sup>US

| Data Element |  |  |  |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                            |
|--------------|--|--|--|--|--|--------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:district              | 0...1<br>0/*  | String | District Code.<br><br>ⓘ Must be a 3-digit numeric code.                                                                                                                                |
|              |  |  |  |  |  | tl:stateOrRegion         | 0...1<br>0/*  | String | The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code.                                                       |
|              |  |  |  |  |  | tl:postalCode            | 0...1<br>1/*  | String | The ZIP or other postal code.                                                                                                                                                          |
|              |  |  |  |  |  | tl:country               | 0...1<br>0/*  | String | The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code.                                                                              |
|              |  |  |  |  |  | tl:corporateFax          | 0...1<br>1/*  | String | Company fax number.                                                                                                                                                                    |
|              |  |  |  |  |  | tl:addressObjectGUID     | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <sup>1</sup><br><br>ⓘ Maximum of 36 characters, using the digits 0-9 and letters A-F       |
|              |  |  |  |  |  | tl:houseGUID             | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS). <sup>2</sup><br><br>ⓘ Maximum of 36 characters, using the digits 0-9 and letters A-F |
|              |  |  |  |  |  | tl:taxRegistrationCode   | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                 |
|              |  |  |  |  |  | tl:premisesCode          | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                  |
|              |  |  |  |  |  | tl:warehouseOperatorName | 0...1<br>0/*  | String | Name of the person responsible for warehouse operations. <sup>3</sup>                                                                                                                  |

<sup>1</sup>19406454-0022-000C-00B0-000000000152<sup>2</sup>986f2934-be05-438f-A30E-c15b90e15dbc<sup>3</sup>John Smith

| Data Element |  |  |                  |                           | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|------------------|---------------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                  | tl:decommissionReasonCode | 0...1<br>0/*  | String   | Reason code for destroying. <sup>1</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                   |
|              |  |  |                  | tl:reasonDescription      | 0...1<br>0/*  | String   | Description for destroy reason code. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |                  | tl:destructionMethod      | 0...1<br>0/*  | String   | Destruction method of the product. <sup>3</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                                                                                                                                                                                                                 |
|              |  |  | AggregationEvent |                           | 0...*         | -        | <p><b>AggregationEvent</b> is option 2 for the <b>EventList</b> choice for the Aggregation events.<br/> <b>EventList = AggregationEvent</b> when:</p> <ul style="list-style-type: none"> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:packing</code></li> <li><b>action</b> = <code>ADD</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:in_progress</code></li> </ul> |
|              |  |  |                  | eventTime                 | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. <sup>4</sup>                                                                                                                                                                                                                                                                                                                   |
|              |  |  |                  | recordTime                | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |                  | eventTimeZoneOffset       | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with the choice made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>5</sup>                                                                                                                                                                                              |
|              |  |  |                  | parentID                  | 1...1<br>1/*  | AnyURI   | <p><b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format.<sup>6</sup><br/> Example:</p> <ul style="list-style-type: none"> <li>For an item-to-case aggregation, the EPC of the case.</li> <li>For a case-to-pallet aggregation, the EPC of the pallet.</li> </ul>                                                                                                 |

<sup>1</sup>PRODUCTION\_DEFECT<sup>2</sup>Defect from production<sup>3</sup>LIQUID\_DILUTION\_DRAINAGE<sup>4</sup>2017-05-19T22:10:02Z<sup>5</sup>-04:00<sup>6</sup>urn:epc:id:sgtin:088202.5503022.100000000670

urn:epc:id:sscc:088202.002000000034

http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943

http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002

| Data Element |  |  |             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|-------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |             |               |        | SGTIN: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | childEPCs   | 1...1<br>-    | -      | <b>Required.</b> List of identifiers of the child items in the parent container in EPC Pure Identity URI format.<br>Example: <ul style="list-style-type: none"> <li>For an item-to-case aggregation, the EPCs of the items.</li> <li>For a case-to-pallet aggregation, the EPCs of the cases.</li> </ul>                                                                                                                                                                                                                                                                                       |
|              |  |  | epc         | 1...*<br>1/*  | String | <b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identity URI format. <sup>1</sup><br>SGTIN: <ul style="list-style-type: none"> <li><code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>Ex: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> SSCC: <ul style="list-style-type: none"> <li><code>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</code></li> <li>Ex: <code>urn:epc:id:sscc:030944.10105363280</code></li> </ul> |
|              |  |  | action      | 1...1<br>1/*  | String | <b>Required.</b> The <b>action</b> value must be set to <code>ADD</code> for the aggregation event. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | bizStep     | 0...1<br>0/*  | AnyURI | The <b>bizStep</b> value must be set to <code>urn:epcglobal:cbv:bizstep:packing</code> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | disposition | 0...1<br>0/*  | AnyURI | The <b>disposition</b> value must be set to <code>urn:epcglobal:cbv:disp:in_progress</code> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | readPoint   | 0...1<br>-    | -      | Optional for <b>AggregationEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>`urn:epc:id:sgtin:088202.5503022.1000000000670``urn:epc:id:sscc:088202.002000000034``http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943``http://epcis.tracelink.com/obj/ntin/4150.001647778.1000000000002`<sup>2</sup>`ADD`<sup>3</sup>`urn:epcglobal:cbv:bizstep:packing`<sup>4</sup>`urn:epcglobal:cbv:disp:in_progress`

| Data Element |  |  |  |                               | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|-------------------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI   | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | bizLocation                   | 0...1<br>-    | -        | <b>Required.</b> Mandatory for <b>AggregationEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI   | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | bizTransactionList            | 0...1<br>-    | -        | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -        | Extensions used for Aggregation Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:packedStatus               | 0...1<br>0/*  | String   | The packout of the item or container using the supported enumeration values. <sup>3</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:quantity                   | 0...1<br>-    | Int      | The quantity of child serial numbers aggregated to the parent container in this aggregation. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | tl:resetContainerAggregation  | 0...1<br>-    | boolean  | Reset container aggregation flag. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | ObjectEvent                   | 0...*<br>-    | -        | <b>EventList.</b> Data = <b>ObjectEvent</b> for End of Batch Events<br><b>EventList = ObjectEvent</b> End of Batch when all of the following is true: <ul style="list-style-type: none"> <li>• <b>bizStep</b> = <a href="http://epcis.tracelink.com/bizstep/batch_closing">http://epcis.tracelink.com/bizstep/batch_closing</a></li> <li>• <b>action</b> = <b>OBSERVE</b></li> <li>• <b>disposition</b> = <a href="http://epcis.tracelink.com/disp/closed">http://epcis.tracelink.com/disp/closed</a></li> </ul> |
|              |  |  |  | eventTime                     | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>urn:epc:id:sgln:1100001.12345.0<sup>2</sup>urn:epc:id:sgln:1100001.12345.0<sup>3</sup>FULL<sup>4</sup>48<sup>5</sup>false<sup>6</sup>2017-05-19T22:08:02Z



| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                             |
|--------------|--|--|---------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | recordTime          | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                               |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with the choice made for <b>eventTime</b> . <sup>1</sup>                         |
|              |  |  | epcList             | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of topmost containers (e.g. pallets, cases) in the shipment. An empty tag is present for this field.                                                  |
|              |  |  | epc                 | 0...<br>1/*   | String   | The EPC identifier in EPC Pure Identity URI format. Is not populated or processed for End of Batch events.                                                                              |
|              |  |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The <b>action</b> value must be set to <b>OBSERVE</b> . <sup>2</sup>                                                                                                   |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>bizStep</b> value must be set to <a href="http://epcis.tracelink.com/bizstep/batch_closing">http://epcis.tracelink.com/bizstep/batch_closing</a> . <sup>3</sup> |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>disposition</b> value must be set to <a href="http://epcis.tracelink.com/disp/closed">http://epcis.tracelink.com/disp/closed</a> . <sup>4</sup>                 |
|              |  |  | readPoint           | 0...1<br>-    | -        | <b>Required.</b> Location where the event occurred.                                                                                                                                     |
|              |  |  | id                  | 1...1<br>0/*  | AnyURI   | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup>                          |
|              |  |  | bizLocation         | 0...1<br>-    | -        | Not used.                                                                                                                                                                               |
|              |  |  | id                  | 1...1<br>1/*  | AnyURI   | <b>Required.</b> Not used. <sup>6</sup>                                                                                                                                                 |
|              |  |  | bizTransactionList  | 1...<br>0/*   | AnyURI   | Not used in End of Batch events.                                                                                                                                                        |

<sup>1</sup>04:00<sup>2</sup>OBSERVE<sup>3</sup>[http://epcis.tracelink.com/bizstep/batch\\_closing](http://epcis.tracelink.com/bizstep/batch_closing)<sup>4</sup><http://epcis.tracelink.com/disp/closed><sup>5</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>6</sup>urn:epc:id:sgln:0614141.12345.1400

| Data Element |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|--|------------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | bizTransaction               | 1...1<br>1/*  | String  | <b>Required.</b> The business transaction identifiers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | @type                        | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type using the supported enumeration values. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | extension                    | 1...1<br>-    | -       | <b>Required.</b> Main extension body for commission event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | ilmd                         | 1...1<br>-    | -       | <b>Required.</b> Instance lot master data specific to product being commissioned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | cbvmdata:lotNumber           | 1...1<br>0/*  | String  | <b>Required.</b> The lot number associated with the <b>tl:internalMaterialCode</b> or <b>tl:countryDrugCode</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | tl:endOfBatchEventExtensions | 1...1<br>-    | -       | Extensions used for End of Batch event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | tl:internalMaterialCode      | 0...1<br>0/*  | Decimal | <p><b>Conditionally required</b> if <b>tl:countryDrugCode</b> is not populated. The internal material number configured in Product Master Data associated with the serialized items updated with the End of Batch message.<sup>3</sup></p> <p>Specifying an internal material number updates all serial numbers at all packaging levels (e.g. item, case) that are linked to the internal material number and specified lot number.</p> <p>One or both of the following options must be sent:</p> <ul style="list-style-type: none"> <li>• <b>tl:internalMaterialCode</b></li> <li>• <b>tl:countryDrugCode</b> and <b>@type</b></li> </ul> <p>An error will be thrown if neither of the two fields are populated.</p> |
|              |  |  |  |  | tl:countryDrugCode           | 0...1<br>0/*  | String  | <p><b>Conditionally required</b> if <b>tl:internalMaterialCode</b> is not populated. The national drug code (e.g. NDC, Swissmedic, PZN, etc.) associated with the serialized items updated with the End of Batch message.<sup>4</sup></p> <p>Specifying a country drug code updates all serial numbers at all packaging levels (e.g. item, case) that are linked to the country drug code and specified lot number.</p> <p>One or both of the following options must be sent:</p> <ul style="list-style-type: none"> <li>• <b>tl:internalMaterialCode</b></li> </ul>                                                                                                                                                  |

<sup>1</sup>urn:epcglobal:cbv:bt:desadv<sup>2</sup>ABC123<sup>3</sup>11002541210<sup>4</sup>0069-4220-66

| Data Element |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--|-----------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                       |               |        | <ul style="list-style-type: none"> <li><b>tl:countryDrugCode</b> and <b>@type</b></li> </ul> <p>An error will be thrown if neither of the two fields are populated.</p>                                                                                                                                                                                         |
|              |  |  |  |  |  | @type                 | 1...1<br>1/*  | String | <b>Required.</b> The national drug code type using the supported enumeration values and any formatting instructions provided. <sup>1</sup> See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                           |
|              |  |  |  |  |  | tl:productionQuantity | 1...*<br>-    | -      | <b>Required.</b> Production quantities. Looping group with reported production quantities. Minimum of one entry required for the Each packaging level. All other packaging levels are optional. Error thrown if group is not populated for Each level.                                                                                                          |
|              |  |  |  |  |  | choice1               | 1...1<br>-    | Choice | <b>Required.</b> Mandatory <b>choice1</b> within <b>cmn:productionQuantity</b> . One of either <b>cmn:packagingItemCode</b> OR <b>cmn:companyPrefix</b> must be populated. Error thrown if neither is populated or if both are populated.                                                                                                                       |
|              |  |  |  |  |  | tl:packagingItemCode  | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:companyPrefix</b> is not populated. The packaging level product code (e.g. GTIN-14) for the packaging level. Either <b>cmn:packagingItemCode</b> or <b>cmn:companyPrefix</b> must be populated. <sup>2</sup>                                                                                                            |
|              |  |  |  |  |  | @type                 | 1...1<br>1/*  | String | <b>Required.</b> The product code type using the supported enumeration values (e.g. GTIN-14). <sup>3</sup> See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:companyPrefix      | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:packagingItemCode</b> is not populated. GS1 company prefix.                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:packagingLevel     | 1...1<br>1/*  | String | <b>Required.</b> The packaging level associated with <b>cmn:packagingItemCode</b> . <sup>4</sup> See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                                                                                      |
|              |  |  |  |  |  | tl:quantityReported   | 1...1<br>-    | Int    | <b>Required.</b> Quantity of serial numbers reported commissioned for the packaging level. <sup>5</sup>                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  | extension             | 0...1<br>-    | -      | EPCIS body event extension point. Contains the <b>TransformationEvent</b> . <b>TransformationEvent</b> is option 3 in the <b>EventList</b> choice. This extension can appear before or after Commissioning Event.                                                                                                                                               |
|              |  |  |  |  |  | TransformationEvent   | 0...1<br>-    | -      | Use the <b>TransformationEvent</b> to commission repackaged products. It is similar to the <b>CommissioningEvent</b> , but includes source products as input, and the commissioned serial numbers are the output repackaged products. The standard ilmd (instance level master data) captures product attributes, lot, and expiry like in a standard commission |

<sup>1</sup>US\_NDC541<sup>2</sup>00882025030223<sup>3</sup>GTIN-14<sup>4</sup>EA<sup>5</sup>10

| Data Element |  |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|---------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                     |               |          | <p>event.</p> <p>The <b>TransformationEvent</b> parameters are the same as the <b>CommissioningEvent</b> except there is no action:</p> <ul style="list-style-type: none"> <li>• <b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:commissioning</code> (optional).</li> <li>• <b>disposition</b> = <code>urn:epcglobal:cbv:disp:active</code> (optional).</li> </ul> <p> The source and repackaged products can only be Primaries or Eaches. Cases and Inner Packs are not permitted.</p>             |
|              |  |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The date/time when the disposition assigned occurs with a time zone indicator as specified in Section 9.5 of (EPCIS1.0.1) in YYYY-MM-DDTHH:MM:SS.mmZ format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | recordTime          | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in effect at time and place where the disposition assigned occurred, consistent with the choice made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | inputEPCList        | 0...1<br>-    | -        | <p><b>Conditionally required</b> if <b>inputQuantityList</b> is not present. The input EPC is the serial number of the source product that is transformed.</p> <p> Only primaries or eaches are allowed in Transformation Event EPC lists.</p> <p> One of either <b>inputEPCList</b> or <b>inputQuantityList</b> is mandatory. If both groups are missing, an error will be thrown. Both groups may be present.</p> |
|              |  |  |  | epc                 | 0...*<br>1/*  | String   | <p><b>Required.</b> The EPC identifier in EPC Pure Identity URI format:<sup>3</sup></p> <p>SGTIN:</p> <ul style="list-style-type: none"> <li>• Format: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>• Example: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul>                                                                                                                                                                                                                   |
|              |  |  |  | inputQuantityList   | 0...1         | -        | <b>Conditionally required</b> if <b>inputEPCList</b> is not present. Specifies non-serialized source products with packaging product                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>2017-03-29T22:10:02.31Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:030000.0000001.100000001020 http://epcis.tracelink.com/obj/ntin/4150.001647778.1000000000002

| Data Element |  |  |  |  |                 | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|-----------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                 |               |         | <p>code, lot number, and quantity.</p> <ul style="list-style-type: none"> <li>For GTIN-based source product, GTIN + Lot is expressed as:<br/><code>urn:epc:class:lgtin:030000.0000001.L12345</code></li> <li>For NTIN-based source product, NTIN + Lot is expressed as:<br/><code>http://epcis.tracelink.com/hc/lntin/class/4150.001647778.L12345</code></li> </ul> <p> The source products can only reference GTINs and NTINs for Primaries or Eaches. Cases and Inner Packs are not permitted.</p> <p> One of either <b>inputEPCList</b> or <b>inputQuantityList</b> is mandatory. If both groups are missing, an error will be thrown. Both groups may be present.</p> |
|              |  |  |  |  | quantityElement | 1...*<br>-    | -       | <b>Required.</b> Identifies a quantity of source products that are identified by a specific class-level 940 identifier in urn format.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | epcClass        | 1...1<br>1/*  | String  | <p><b>Required.</b> A class level identifier for the source product in <b>inputQuantityList</b> for which the quantity is provided.<sup>1</sup><br/>Format: <code>urn:epc:idpat:ObjectIdentifierType:CompanyPrefix.ItemRefAndIndicator.*</code></p> <ul style="list-style-type: none"> <li>For GTIN based source product, GTIN + Lot is expressed as:<br/><code>urn:epc:class:lgtin:030000.0000001.L12345</code></li> <li>For NTIN based source product, NTIN + Lot is expressed as:<br/><code>http://epcis.tracelink.com/hc/lntin/class/4150.001647778.L12345</code></li> </ul>                                                                                                                                                                                                                                                            |
|              |  |  |  |  | quantity        | 1...1<br>-    | Integer | <b>Required.</b> A number that specifies how many or how much of the specified <b>epcClass</b> is denoted by this <b>quantityElement</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | uom             | 0...1<br>0/*  | String  | Unit of measure for the <b>epcClass</b> quantity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | outputEPCList   | 1...1<br>-    | -       | <p><b>Required.</b> Provides the epc serial number for the transformed product.</p> <p> <b>outputEPCList</b> is mandatory if Transformation Event is populated. An error will be thrown if <b>outputEPCList</b> is missing.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>urn:epc:class:lgtin:030000.0000001.L12345<sup>2</sup>10

| Data Element |  |  |  |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                  |               |        |  Only Primaries or Eaches are allowed in Transformation Event EPC lists. Output EPCS list provides the EPC serial number for the transformed product.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | epc              | 1...*<br>1/*  | String | <b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identifier URI format as specified in Section 6 of [TDS1.5]. <sup>1</sup><br>SGTIN: <ul style="list-style-type: none"> <li>Format: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>Example: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> SSCC: <ul style="list-style-type: none"> <li>Format: <code>http://epcis.tracelink.com/hc/ntin/obj/&lt;company prefix&gt;.&lt;item reference&gt;.&lt;serial number&gt;</code></li> <li>Example: <code>http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002</code></li> </ul> |
|              |  |  |  | transformationID | 0...1<br>0/*  | AnyURI | An identifier that links this event to other Transformation Events using an identical <b>transformationID</b> value. When specified, all inputs to all events sharing the same value of the <b>transformationID</b> may contribute to all outputs of all events sharing that value of <b>transformationID</b> .                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | bizStep          | 0...1<br>0/*  | AnyURI | The <b>bizStep</b> value must be set to <code>urn:epcglobal:cbv:bizstep:commissioning</code> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | disposition      | 0...1<br>0/*  | AnyURI | The <b>disposition</b> value must be set to <code>urn:epcglobal:cbv:disp:active</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | readPoint        | 0...1<br>-    | -      | Not used in Transformation Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | id               | 0...1<br>0/*  | AnyURI | Not used in Transformation Event. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | bizLocation      | 1...1<br>-    | -      | <b>Required.</b> Refers to the location of the product after the Transformation Event has occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>urn:epc:id:sgtin:088202.5503022.100000000670 urn:epc:id:sscc:088202.002000000034 http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943

http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002

<sup>2</sup>urn:epcglobal:cbv:bizstep:commissioning

<sup>3</sup>urn:epc:id:sgln:7777776.67345.0

| Data Element |  |  |  |  |  |                              |  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--|------------------------------|--|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | id                           |  | 1...1<br>1/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the commissioning occurred. This may be a site-level SGLN or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | bizTransactionList           |  | 0...*<br>1/*  | String  | The business transaction identifiers provide an unordered list of 0 or more business transactions that define the context of this event.                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | ilmd                         |  | 0...1<br>-    | -       | Instance lot master data specific to product being commissioned.                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | cbvmda:lotNumber             |  | 0...1<br>1/*  | String  | <b>Required.</b> The lot number associated with the <b>tl:internalMaterialCode</b> , <b>tl:packagingItemCode</b> , or <b>tl:countryDrugCode</b> that is used to identify the serial numbers that will be updated. <sup>2</sup>                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | cbvmda:itemExpirationDate    |  | 0...1<br>0/*  | Date    | The expiration date for the serialized item in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:commissionEventExtensions |  | 0...1<br>-    | -       | <b>Required.</b> Extensions used for Commission <b>ObjectEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:filterValue               |  | 0...1<br>-    | Integer | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:packagingLevel            |  | 1...1<br>0/*  | String  | <p><b>Conditionally required</b> for GS1 EPCIS conformance. The packaging level of the commissioned item using the supported enumeration values.<br/>Valid value: <b>EA</b> = Each<sup>4</sup></p> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> |
|              |  |  |  |  |  | tl:epcAttributes             |  | 0...*<br>-    | -       | Supports optional inclusion of human readable barcode content associated with each epc number in a commission event. Only included if provided in original commission event.                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | @epc                         |  | 1...1<br>1/*  | String  | The EPC serial number to which the <b>tl:barcodeContent</b> is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5].<br>Valid value: <b>SGTIN</b> <sup>5</sup>                                                                                                                                                                                                                                                            |

<sup>1</sup>urn:epc:id:sgln:7777776.67345.0<sup>2</sup>L120012<sup>3</sup>2019-12-31<sup>4</sup>EA<sup>5</sup>urn:epc:id:sgtin:088202.0503022.100000001020

| Data Element |  |  |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--|--|-------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:barcodeContent       | 1...1<br>0/*  | String | The human-readable barcode contents encoded in the 2D barcode with parentheses for the AI keys. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  |  | tl:plantLocationId      | 0...1<br>0/*  | String | Identifier of the plant where products are commissioned. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  |  | tl:productionLineId     | 0...1<br>1/*  | String | Identifier of the production line where products are commissioned. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | tl:lineManagerName      | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  | tl:companyPrefix        | 0...1<br>0/*  | String | The GS1 Company Prefix.                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | tl:internalMaterialCode | 0...1<br>0/*  | String | <p><b>Conditionally required</b> for GS1 EPCIS conformance. Internal material number for the product in the Pharmaceutical Manufacturer's internal systems (e.g. ERP).<sup>5</sup></p> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> |
|              |  |  |  |  |  |  | tl:packagingItemCode    | 0...1<br>0/*  | String | <p><b>Conditionally required</b> for GS1 EPCIS conformance. The product code for the commissioned item (e.g. GTIN-14).<sup>6</sup></p> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p>                                                 |
|              |  |  |  |  |  |  | @type                   | 1...1         | String | <b>Required.</b> The product code type. Valid values: <sup>7</sup>                                                                                                                                                                                                                                                                                                                                                                                  |

1

(01)00882025030223

(21)100000001020

(17)190331(10)L120012

2M0034

3L009

4John Smith

511002541210

600882025030223

7GTIN-14



| Data Element |  |  |  |  |  |                          |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|--|--|--------------------------|--|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                          |  |               |        | <ul style="list-style-type: none"> <li>• <a href="#">GTIN-14</a></li> <li>• <a href="#">NTIN</a></li> </ul>                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:countryDrugCode       |  | 0...1<br>0/*  | String | <p><b>Conditionally required</b> for GS1 EPCIS conformance. The national drug code for the commissioned item (e.g. NDC number for US products).<sup>1</sup></p> <p><b>ⓘ</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p>                                                                    |
|              |  |  |  |  |  | @type                    |  | 1...1<br>1/*  | String | <p><b>Required.</b> The national drug code type using the supported enumeration values and any formatting instructions provided.<sup>2</sup></p> <p><b>ⓘ</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | tl:manufacturingDate     |  | 0...1<br>0/10 | Date   | The date of manufacture for the serialized item in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | tl:countryMarket         |  | 0...1<br>0/3  | String | The country using the standard two- or three-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>4</sup>                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:printedExpirationDate |  | 0...1<br>0/10 | Date   | Expiration date printed on label in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | tl:referenceDocuments    |  | 0...1<br>-    | -      | Reference document identifier associated with the commissioning activity.                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:poNumber              |  | 0...1<br>0/*  | String | PO Number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:poLine                |  | 0...1<br>0/*  | String | PO Line number.                                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>M8202503022<sup>2</sup>US\_NDC442<sup>3</sup>2017-03-29<sup>4</sup>US<sup>5</sup>2017-03-29

| Data Element |  |  |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|--|------------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:workOrderNumber           | 0...1<br>0/*  | String  | Work Order number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  | tl:referenceIdentifier       | 0...1<br>0/*  | String  | Reference identifier (e.g. any type of identifier) associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | tl:extensionField            | 0...*<br>-    | -       | <p>Customer extension point to supply one or more name/value pairs containing additional data attributes not already supported in this message.</p> <p> If this element group is populated, both <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated.</p> <p> These extensions are not stored by TraceLink and are only used for outbound mapping purposes when there is a requirement to provide additional data to a partner for this message, such as when a CMO is required to provide additional data fields to the brand owner. In this case, TraceLink would have a custom map for that partner to map these fields outbound. Different partners may have different field requirements and may therefore require that the <b>ExtensionField</b> be populated differently per trade partner.</p> |
|              |  |  |  |  |  |  | tl:fieldName                 | 1...1<br>1/*  | String  | <p><b>Required.</b> The field name provided by the partner that will be receiving the mapped outbound message.<sup>1</sup></p> <p> The field name must match the field name provided by the trade partner exactly, including case so that it can be properly detected in the outbound mapping.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  | tl:fieldValue                | 1...1<br>1/*  | String  | <b>Required.</b> The field value content that corresponds to <b>tl:fieldName</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  |  | extension                    | 0...1<br>-    | -       | <b>TransformationEvent</b> extension.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | tl:decommissionSourceProduct | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs system to implicitly decommission serial numbers used for repackaging. Saves a step in the repack operation so that separate decommission events do not need to be sent. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  |  | tl:registerSourceProduct     | 0...1<br>-    | Boolean | Triggers registration of serial numbers that are not known to the TraceLink system. Defaults to <b>false</b> if not populated. <sup>4</sup> If value = <b>true</b> , <b>tl:repackInputAttributes</b> element group must be populated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>POTENCY<sup>2</sup>100 MG<sup>3</sup>true<sup>4</sup>true

| Data Element |  |  |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                          |
|--------------|--|--|--|--|--|-----------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:repackInputAttributes    | 0...1<br>-    | -      | <b>Conditionally required</b> if cmn:registerSourceProduct = <b>true</b> . Repack input common attributes group with product info for input product. |
|              |  |  |  |  |  | cbvmdata:lotNumber          | 1...1<br>0/20 | String | <b>Required.</b> The lot or batch code for the transformation input product in an alphanumeric string of up to 20 characters. <sup>1</sup>           |
|              |  |  |  |  |  | cbvmdata:itemExpirationDate | 0...1<br>0/*  | Date   | <b>Required.</b> The expiration date for the transformation input product in YYYY-MM-DD format. <sup>2</sup>                                         |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:cbvmdata="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1" schemaVersion="1.2"
creationDate="2018-01-31T17:45:20Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">0882028677019</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">0333331013655</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>201801311745200001</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2018-01-31T17:45:20Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
    <extension>
      <EPCISMasterData>
```

<sup>1</sup>B64894<sup>2</sup>2020-04-28

```

    <VocabularyList>
      <Vocabulary type="urn:epcglobal:epcis:vtype:EPCClass">
        <VocabularyElementList>
          <VocabularyElement id="urn:epc:idpat:sgtin:0088202.503033.*">
            <attribute id="http://epcis.tracelink.com/mda/packageType">
            <attribute id="urn:epcglobal:cbv:mda#additionalTradeItem">
            <attribute id="urn:epcglobal:cbv:mda#additionalTradeItem">
          </VocabularyElement>
        </VocabularyElementList>
      </Vocabulary>
    </VocabularyList>
  </EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <ObjectEvent>
      <eventTime>2018-01-31T00:12:23.830Z</eventTime>
      <eventTimeZoneOffset>+05:00</eventTimeZoneOffset>
      <epcList>
        <epc>urn:epc:id:sscc:088202.002000000034</epc>
      </epcList>
      <action>ADD</action>
      <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
      <disposition>urn:epcglobal:cbv:disp:active</disposition>
      <readPoint>
        <id>urn:epc:id:sgln:088202.867701.0</id>
      </readPoint>
      <bizLocation>
        <id>urn:epc:id:sgln:088202.867701.0</id>
      </bizLocation>
    </ObjectEvent>
    <ObjectEvent>
      <eventTime>2018-01-31T00:12:24.830Z</eventTime>
      <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
      <epcList>
        <epc>urn:epc:id:sgtin:0088202.503033.1000000000670</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.1000000000222</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.1000000000225</epc>
      </epcList>

```

```

<action>ADD</action>
<bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
<disposition>urn:epcglobal:cbv:disp:active</disposition>
<readPoint>
  <id>urn:epc:id:sgln:088202.867701.0</id>
</readPoint>
<bizLocation>
  <id>urn:epc:id:sgln:088202.867701.0</id>
</bizLocation>
<extension>
  <ilmd>
    <cbvmdata:lotNumber>L120012</cbvmdata:lotNumber>
    <cbvmdata:itemExpirationDate>2019-03-31</cbvmdata:itemExpirationDate>
    <tl:commissionEventExtensions>
      <tl:manufacturingDate>2018-01-31</tl:manufacturingDate>
    </tl:commissionEventExtensions>
  </ilmd>
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</ObjectEvent>
<ObjectEvent>
  <eventTime>2018-01-31T00:12:25.830Z</eventTime>
  <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
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    <epc>urn:epc:id:sgtin:0088202.503033.100000001021</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001022</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001023</epc>
    <epc>urn:epc:id:sgtin:0088202.503033.100000001024</epc>
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  </epcList>
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  <disposition>urn:epcglobal:cbv:disp:active</disposition>
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  </bizLocation>
  <extension>

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        <ilmd>
            <cbvmda:lotNumber>L120012</cbvmda:lotNumber>
            <cbvmda:itemExpirationDate>2019-03-31</cbvmda:itemExpirationDate>
            <tl:commissionEventExtensions>
                <tl:manufacturingDate>2018-01-31</tl:manufacturingDate>
            </tl:commissionEventExtensions>
        </ilmd>
    </extension>
</ObjectEvent>
<ObjectEvent>
    <eventTime>2018-01-31T00:12:25.830Z</eventTime>
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        <epc>urn:epc:id:sgtin:0088202.503033.100000001023</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.100000001024</epc>
        <epc>urn:epc:id:sgtin:0088202.503033.100000001025</epc>
    </epcList>
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    <disposition>urn:epcglobal:cbv:disp:active</disposition>
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    </readPoint>
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    </bizLocation>
    <extension>
        <ilmd>
            <cbvmda:lotNumber>L120012</cbvmda:lotNumber>
            <cbvmda:itemExpirationDate>2019-03-31</cbvmda:itemExpirationDate>
            <tl:commissionEventExtensions>
                <tl:manufacturingDate>2018-01-31</tl:manufacturingDate>
            </tl:commissionEventExtensions>
        </ilmd>
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</ObjectEvent>
<ObjectEvent>

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<eventTime>2018-01-31T00:12:26.830Z</eventTime>
<eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
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  <epc>urn:epc:id:sgtin:088202.0503022.100000001021</epc>
</epcList>
<action>DELETE</action>
<bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
<disposition>urn:epcglobal:cbv:disp:inactive</disposition>
<readPoint>
  <id>urn:epc:id:sgln:088202.867701.0</id>
</readPoint>
<tl:decommissionEventExtensions>
  <tl:transactionDate>2018-01-31</tl:transactionDate>
  <tl:disaggregateFromParent>false</tl:disaggregateFromParent>
  <tl:marketCountryCode>US</tl:marketCountryCode>
  <tl:warehouseOperatorName>John Smith</tl:warehouseOperatorName>
  <tl:decommissionReasonCode>PRODUCTION_DEFECT</tl:decommissionReasonCode>
  <tl:reasonDescription>Defect from production</tl:reasonDescription>
</tl:decommissionEventExtensions>
</ObjectEvent>
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  <epcList>
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    <epc>urn:epc:id:sgtin:088202.0503022.100000001021</epc>
  </epcList>
  <action>DELETE</action>
  <bizStep>urn:epcglobal:cbv:bizstep:destroying</bizStep>
  <disposition>urn:epcglobal:cbv:disp:destroyed</disposition>
  <readPoint>
    <id>urn:epc:id:sgln:088202.867702.0</id>
  </readPoint>
  <tl:destroyEventExtensions>
    <tl:transactionDate>2017-01-30</tl:transactionDate>
    <tl:disaggregateFromParent>false</tl:disaggregateFromParent>
    <tl:marketCountryCode>US</tl:marketCountryCode>
    <tl:decommissionReasonCode>DAMAGED</tl:decommissionReasonCode>
  </tl:destroyEventExtensions>

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</ObjectEvent>
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    <epc>urn:epc:id:sgtin:0088202.503033.100000001021</epc>
  </childEPCs>
  <action>ADD</action>
  <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
  <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
  <readPoint>
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  </readPoint>
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  </bizLocation>
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  <childEPCs>
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    <epc>urn:epc:id:sgtin:0088202.503033.100000001023</epc>
  </childEPCs>
  <action>ADD</action>
  <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
  <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
  <readPoint>
    <id>urn:epc:id:sgln:088202.67345.0</id>
  </readPoint>
  <bizLocation>
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  </bizLocation>
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<parentID>urn:epc:id:sgtin:0088202.503033.100000000225</parentID>
<childEPCs>
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  <epc>urn:epc:id:sgtin:0088202.503033.100000001025</epc>
</childEPCs>
<action>ADD</action>
<bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
<disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
<readPoint>
  <id>urn:epc:id:sgln:088202.67345.0</id>
</readPoint>
<bizLocation>
  <id>urn:epc:id:sgln:088202.67345.0</id>
</bizLocation>
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  <childEPCs>
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  <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
  <readPoint>
    <id>urn:epc:id:sgln:088202.67345.0</id>
  </readPoint>
  <bizLocation>
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    <epc/>
  </epcList>

```

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<action>OBSERVE</action>
<bizStep>http://epcis.tracelink.com/bizstep/batch_closing</bizStep>
<disposition>http://epcis.tracelink.com/disp/closed</disposition>
<readPoint>
  <id>urn:epc:id:sgln:064202.867702.0</id>
</readPoint>
<extension>
  <ilmd>
    <cbvmdata:lotNumber>L120012</cbvmdata:lotNumber>
    <tl:endOfBatchEventExtensions>
      <tl:internalMaterialCode>11002-5412-11</tl:internalMaterialCode>
      <tl:countryDrugCode type="FDA_NDC_11">US</tl:countryDrugCode>
      <tl:productionQuantity>
        <tl:packagingItemCode type="GTIN-14">00882025030223</tl:packagingItemCode>
        <tl:packagingLevel>EA</tl:packagingLevel>
        <tl:quantityReported>100</tl:quantityReported>
      </tl:productionQuantity>
    </tl:endOfBatchEventExtensions>
  </ilmd>
</extension>
</ObjectEvent>
<extension>
  <TransformationEvent>
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    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
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      <epc>urn:epc:id:sgtin:088202.5503023.100000000671</epc>
      <epc>urn:epc:id:sgtin:088202.5503023.100000000672</epc>
    </inputEPCList>
    <outputEPCList>
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    </outputEPCList>
    <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
    <disposition>urn:epcglobal:cbv:disp:active</disposition>
    <bizLocation>
      <id>urn:epc:id:sgln:7777776.67345.0</id>
    </bizLocation>
    <ilmd>
      <cbvmdata:lotNumber>L120012</cbvmdata:lotNumber>

```

```

        <cbvmdata:itemExpirationDate>2020-03-29</cbvmdata:itemExpirationDate>
        <tl:commissionEventExtensions>
            <tl:packagingLevel>EA</tl:packagingLevel>
            <tl:plantLocationId>M0034</tl:plantLocationId>
            <tl:productionLineId>L009</tl:productionLineId>
            <tl:lineManagerName>John Smith</tl:lineManagerName>
            <tl:packagingItemCode type="GTIN-14">00882025030223</tl:packagi
            <tl:manufacturingDate>2018-03-14</tl:manufacturingDate>
            <tl:countryMarket>US</tl:countryMarket>
        </tl:commissionEventExtensions>
    </ilmd>
    <extension>
        <tl:decommissionSourceProduct>true</tl:decommissionSourceProduct>
        <tl:registerSourceProduct>true</tl:registerSourceProduct>
        <tl:repackInputAttributes>
            <cbvmdata:lotNumber>B64894</cbvmdata:lotNumber>
            <cbvmdata:itemExpirationDate>2020-03-29</cbvmdata:itemExpirationDate>
        </tl:repackInputAttributes>
    </extension>
</TransformationEvent>
</extension>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                 | Error Message                                                      | Description                                                                                             |
|----------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Class 1 Errors                               |                                                                    |                                                                                                         |
| sbdh:Sender   sbdh:Identifier   @Authority   | Valid Sender/Identifier Authority is required !!!                  | The error occurs if the source is empty or null.                                                        |
| sbdh:Receiver   sbdh:Identifier   @Authority | Valid Receiver/Identifier Authority is required !!!                | The error occurs if the source is empty or null.                                                        |
| VocabularyElement   @id                      | Item code is required in source VocabularyElement[@id] !!!         | The error occurs if the source is empty or null.                                                        |
|                                              | SGTIN or NTIN in VocabularyElement id is required !!!              | The error occurs if master data is present in header extension, but the source is not an SGTIN or NTIN. |
| VocabularyElement   attribute                | Packaging Level is required if header master data is populated !!! | The error occurs if header master data is populated, but packaging level                                |

| Data Element                  | Error Message                                                        | Description                                                                                                                                       |
|-------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
|                               |                                                                      | is missing.                                                                                                                                       |
|                               | Either internal material code or country drug code is required !!!   | The error occurs if neither tl:internalMaterialCode or tl:countryDrugCode are present.                                                            |
|                               | Only one country drug code is supported !!!                          | The error occurs if more than one country drug code is present in the source.                                                                     |
| VocabularyElement   @id       | GLN Party type not supported. SGLN is required !!!                   | The error occurs if the source is not an SGLN.                                                                                                    |
|                               | Valid decommissioning event location identifier type is required !!! | The error occurs if the source is invalid.                                                                                                        |
| VocabularyElement   attribute | Decommissioning event location business name is required !!!         | The error occurs if the source is empty or null.                                                                                                  |
|                               | Valid business classification code is required !!!                   | The error occurs if the source is invalid.                                                                                                        |
|                               | Decommissioning event location street address is required !!!        | The error occurs if the source is empty or null.                                                                                                  |
|                               | Decommissioning event location city is required !!!                  | The error occurs if the source is empty or null.                                                                                                  |
|                               | 3-digit numeric District code required for country India !!!         | The error occurs if country = "IN" and the source is empty or null.                                                                               |
|                               | Decommissioning event location state or region is required !!!       | The error occurs if the source is empty or null.                                                                                                  |
|                               | Decommissioning event location country is required !!!               | The error occurs if the source is empty or null.<br>The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement   @id       | Valid destroy location party lookup identifier type is required !!!  | The error occurs if the source is invalid.                                                                                                        |

| Data Element                                                 | Error Message                                                                                 | Description                                                                                                                                       |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| VocabularyElement   <b>attribute</b>                         | Valid business classification code is required !!!                                            | The error occurs if the source is empty or null.                                                                                                  |
|                                                              | Destroy event location business name is required !!!                                          | The error occurs if the source is empty or null.                                                                                                  |
|                                                              | Destroy event location street address is required !!!                                         | The error occurs if the source is empty or null.                                                                                                  |
|                                                              | Destroy event location city is required !!!                                                   | The error occurs if the source is empty or null.                                                                                                  |
|                                                              | 3-digit numeric District code required for country India !!!                                  | The error occurs if country = "IN" and the source is empty or null.                                                                               |
|                                                              | Destroy event location state or region is required !!!                                        | The error occurs if the source is empty or null.                                                                                                  |
|                                                              | Destroy event location country is required !!!                                                | The error occurs if the source is empty or null.<br>The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement   <b>attribute</b>                         | Valid packagingLevel code required !!!                                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                     |
| ObjectEvent (Commissioning Events)                           | At least one commissioning event is required !!!                                              | The error occurs if both the TransformationEvent and the source are empty or null.                                                                |
| epc                                                          | Invalid EPC format !!!                                                                        | The error occurs if the source is invalid.                                                                                                        |
| ObjectEvent (Commissioning Events)   <b>action</b>           | Action ADD is required for ObjectEvent commissioning !!!                                      | The error occurs if the source does not equal ADD.                                                                                                |
| ObjectEvent (Commissioning Events)   <b>bizStep</b>          | bizStep urn:epcglobal:cbv:bizstep:commissioning is required for ObjectEvent commissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:commissioning".                                                          |
| ObjectEvent (Commissioning Events)   <b>disposition</b>      | Disposition urn:epcglobal:cbv:disp:active is required for ObjectEvent commissioning !!!       | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:active".                                                                    |
| ObjectEvent (Commissioning Events)   bizLocation   <b>id</b> | Event location in the commissioning event is required !!!                                     | The error occurs if the source is empty or null.                                                                                                  |
| cbvmdata:lotNumber                                           | Lot number is required !!!                                                                    | The error occurs if the source is empty or null. (optional for SSCC commissioned serial numbers)                                                  |
| cbvmdata:itemExpirationDate                                  | Expiration date is required !!!                                                               | The error occurs if the source is empty or null. (optional for SSCC commissioned serial numbers)                                                  |
| tl:packagingLevel                                            | Valid packaging level is required !!!                                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                     |
|                                                              | Packaging Level is required !!!                                                               | The error occurs if the source is empty or null. (optional for SSCC)                                                                              |

| Data Element                                              | Error Message                                                                         | Description                                                                                         |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|                                                           |                                                                                       | commissioned serial numbers)                                                                        |
| tl:packagingItemCode   <b>@type</b>                       | Packaging item code type required if packagingItemCode is populated !!!               | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| tl:countryDrugCode   <b>@type</b>                         | Country drug code type is required if country drug code is populated !!!              | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| tl:fieldName                                              | Field name is required if ExtensionField group present in source !!!                  | The error occurs if the source is empty or null.                                                    |
| tl:fieldValue                                             | Field value is required if ExtensionField group present in source !!!                 | The error occurs if the source is empty or null.                                                    |
| ObjectEvent (Decommissioning Events)   <b>action</b>      | Action DELETE is required for decommissioning !!!                                     | The error occurs if the source does not equal DELETE.                                               |
| ObjectEvent (Decommissioning Events)   <b>bizStep</b>     | bizStep urn:epcglobal:cbv:bizstep:decommissioning is required for decommissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:decommissioning".          |
| ObjectEvent (Decommissioning Events)   <b>disposition</b> | Disposition urn:epcglobal:cbv:disp:inactive is required for decommissioning !!!       | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:inactive".                    |
| readPoint   <b>id</b>                                     | Source read point ID is required !!!                                                  | The error occurs if the source is empty or null.                                                    |
|                                                           | Valid decommissioning event location identifier type is required !!!                  |                                                                                                     |
| tl:businessId   <b>@type</b>                              | Valid business identifier type is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
|                                                           | Party type attribute is required when BusinessId is populated !!!                     | The error occurs if the source is empty or null.                                                    |
| tl:businessClassification                                 | Valid business classification value is required !!!                                   | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| tl:businessName                                           | Transfer from business party name is required !!!                                     | The error occurs if the source is empty or null.                                                    |
| tl:street1                                                | Transfer from business party street address is required !!!                           | The error occurs if the source is empty or null.                                                    |
| tl:city                                                   | Transfer from business party city is required !!!                                     | The error occurs if the source is empty or null.                                                    |
| tl:stateOrRegion                                          | Transfer from business party state or region is required !!!                          | The error occurs if the source is empty or null.                                                    |
| tl:country                                                | Transfer from business party country is required !!!                                  | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| tl:decommissionReasonCode                                 | Valid reason code is required !!!                                                     | The error occurs if the source is present, but there is no matching entry in the lookup file.       |

| Data Element                                           | Error Message                                                                                         | Description                                                                                       |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| ObjectEvent (Destroying Events)   <b>action</b>        | Action DELETE is required for destroying !!!                                                          | The error occurs if the source does not equal DELETE.                                             |
| ObjectEvent (Destroying Events)   <b>bizStep</b>       | bizStep urn:epcglobal:cbv:bizstep:destroying is required for destroying !!!                           | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:destroying".             |
| ObjectEvent (Destroying Events)   <b>disposition</b>   | Disposition urn:epcglobal:cbv:disp:destroyed is required for destroying !!!                           | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:destroyed".                 |
| readPoint   <b>id</b>                                  | Valid destroy event location identifier type is required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.     |
| parentID                                               | Invalid EPC format !!!                                                                                | The error occurs if the source is invalid.                                                        |
| AggregationEvent   <b>bizStep</b>                      | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!                    | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing".                |
| AggregationEvent   <b>disposition</b>                  | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!!               | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".               |
| AggregationEvent   bizLocation   <b>id</b>             | Event location in the aggregation event is required !!!                                               | The error occurs if the source is empty or null.                                                  |
| ObjectEvent (End of Batch Events)                      | End of Batch event data is required !!!                                                               | The error occurs if the source is empty or null.                                                  |
| ObjectEvent (End of Batch Events)   <b>action</b>      | Action OBSERVE is required for ObjectEvent end of batch !!!                                           | The error occurs if the source does not equal OBSERVE.                                            |
| ObjectEvent (End of Batch Events)   <b>bizStep</b>     | bizStep http://epcis.tracelink.com/bizstep/batch_closing is required for ObjectEvent end of batch !!! | The error occurs if the source does not equal "http://epcis.tracelink.com/bizstep/batch_closing". |
| ObjectEvent (End of Batch Events)   <b>disposition</b> | Disposition http://epcis.tracelink.com/disp/closed is required for ObjectEvent end of batch !!!       | The error occurs if the source does not equal "http://epcis.tracelink.com/disp/closed".           |
| readPoint   <b>id</b>                                  | Event location in the end of batch event is required !!!                                              | The error occurs if the source is empty or null.                                                  |
| tl:internalMaterialCode                                | Either internal material code or country drug code is required !!!                                    | The error occurs if neither tl:internalMaterialCode or tl:countryDrugCode are populated.          |
| tl:productionQuantity   <b>choice1</b>                 | Either packaging item code or company prefix is required !!!                                          | The error occurs if neither tl:packagingItemCode or tl:companyPrefix are populated.               |
|                                                        | Only one of packaging item code or company prefix is required !!!                                     | The error occurs if both tl:packagingItemCode and tl:companyPrefix are present.                   |
| tl:quantityReported                                    | Quantity report for packaging level EA is required !!!                                                | The error occurs if tl:packagingLevel = EA and source is null or empty.                           |

| Data Element                                                                                                                                                       | Error Message                                                                               | Description                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| inputEPCList                                                                                                                                                       | One of either inputEPCList OR inputQuantityList is required !!!                             | The error occurs if the source is empty or null.                                                         |
| inputEPCList   <b>epc</b>                                                                                                                                          | Invalid EPC format !!!                                                                      | The error occurs if the source value could not be translated or is in a format other than SGTIN or NTIN. |
|                                                                                                                                                                    | SSCC code is invalid in inputEPCList !!!                                                    | The error occurs if the source is not a SGTIN or NTIN.                                                   |
| quantityElement   <b>epcClass</b>                                                                                                                                  | Valid item code is required !!!                                                             | The error occurs if the source is invalid.                                                               |
|                                                                                                                                                                    | Lot number is required !!!                                                                  | The error occurs if the source is empty or null.                                                         |
| quantityElement   <b>quantity</b>                                                                                                                                  | Input quantity for epcClass is required !!!                                                 | The error occurs if inputQuantityList is populated, but the source is empty or null.                     |
| outputEPCList                                                                                                                                                      | Output epc list is required !!!                                                             | The error occurs if the source is empty or null.                                                         |
| outputEPCList   <b>epc</b>                                                                                                                                         | epc list is required !!!                                                                    | The error occurs if the source is empty or null.                                                         |
|                                                                                                                                                                    | SSCC code is invalid in outputEPCList !!!                                                   | The error occurs if the source is invalid.                                                               |
|                                                                                                                                                                    | China resource code serial number is not supported. Serial number must be NTIN or SGTIN !!! | The error occurs if the source is not a NTIN or SGTIN.                                                   |
|                                                                                                                                                                    | Invalid EPC format !!!                                                                      | The error occurs if the source is invalid.                                                               |
| bizLocation   <b>id</b>                                                                                                                                            | Event location in the commissioning event is required !!!                                   | The error occurs if the source is empty or null.                                                         |
| tl:fieldName                                                                                                                                                       | Field name is required !!!                                                                  | The error occurs if the source is empty or null.                                                         |
| tl:fieldValue                                                                                                                                                      | Field value is required !!!                                                                 | The error occurs if the source is empty or null.                                                         |
| tl:repackInputAttributes                                                                                                                                           | repackInputAttributes group is required if registerSourceProduct equals true !!!            | The error occurs if tl:registerSourceProduct is set to true, but the source is empty or null.            |
| <b>Class 2 Errors</b>                                                                                                                                              |                                                                                             |                                                                                                          |
| -                                                                                                                                                                  | -                                                                                           | -                                                                                                        |
| <b>Class 3 Errors</b>                                                                                                                                              |                                                                                             |                                                                                                          |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered.. |                                                                                             |                                                                                                          |



# Aggregation APIs

## Why do I use these messages?

Use these messages to capture the aggregation of serial numbers to a parent container.

## Which reports do these messages generate?

These messages generate [911 - Unit Pack](#) and [914 - Unit Append](#) reports in the Russia Compliance application if the items being aggregated have a target market of Russia. TraceLink submits the appropriate report to MDLP, based on which report MDLP is prepared to accept.

## ESM Aggregation (EPCIS v1.2)

### Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_ESM\_AGGREGATE

**Info Exchange Display Name:** ESM Aggregate

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element                        |  |  |  |  |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------|--|--|--|--|--|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument                 |  |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| @schemaVersion                      |  |  |  |  |  | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                       |
| @creationDate                       |  |  |  |  |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                     |
| EPCISHeader                         |  |  |  |  |  | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| sbdh:StandardBusinessDocumentHeader |  |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                            |
| sbdh:HeaderVersion                  |  |  |  |  |  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                               |
| sbdh:Sender                         |  |  |  |  |  | 1...*         | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                       |
| sbdh:Identifier                     |  |  |  |  |  | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p> GLNs do not have a urn/http prefix.</p> |
| @Authority                          |  |  |  |  |  | 1...1<br>1/*  | String   | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to GLN for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>5</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                          |
| sbdh:Receiver                       |  |  |  |  |  | 1...*         | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the                                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup>1.2<sup>2</sup>2013-10-01T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |  |                             | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|-----------------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |               |          | organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | sbdh:Identifier             | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>• <a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li>• <a href="#">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <p> GLNs do not have a urn/http prefix.</p> |
|              |  |  | @Authority                  | 1...1<br>1/*  | String   | <p><b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>2</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                             |
|              |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -        | <p><b>Required.</b> Contains the identification group for the message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | sbdh:Standard               | 1...1<br>0/*  | String   | <p><b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a>.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | sbdh:TypeVersion            | 1...1<br>0/*  | String   | <p><b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a>.<sup>4</sup></p>                                                                                                                                                                                                                                                           |
|              |  |  | sbdh:InstanceIdentifier     | 1...1<br>1/*  | String   | <p><b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others.<sup>5</sup></p>                                                                                                                                                                                                                                                                                         |
|              |  |  | sbdh:Type                   | 1...1<br>0/*  | String   | <p><b>Required.</b> Document type. Value is set to <a href="#">Events</a> for an aggregation event.<sup>6</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | sbdh:CreationDateAndTime    | 1...1<br>0/*  | DateTime | <p><b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT</p>                                                                                                                                                                                                                                                                           |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCglobal<sup>4</sup>1.0<sup>5</sup>000001<sup>6</sup>Events

| Data Element |           |           |                  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-----------|-----------|------------------|---------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |           |                  |                     |               |          | <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                  |
|              | EPCISBody |           |                  |                     | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for the aggregation message.                                                                                                                                                                                                                                                                                                |
|              |           | EventList |                  |                     | 1...1<br>-    | -        | <b>Required.</b> The <b>EventList</b> must contain one or more <b>AggregationEvent</b> data elements for an aggregation message.                                                                                                                                                                                                                                              |
|              |           |           | AggregationEvent |                     | 0...*<br>-    | -        | <p>The <b>AggregationEvent</b> is used in the <b>EventList</b> and indicates an aggregation event when:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = <b>ADD</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:packing</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul>                                     |
|              |           |           |                  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the <b>Z</b> to be appended; however if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>2</sup>                                                |
|              |           |           |                  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for <b>eventTime</b> . A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time - whether it is standard time or daylight saving time, per Section 7.2.8 of [EPCIS1.0.1]. <sup>3</sup> |
|              |           |           |                  | parentID            | 0...1<br>0/*  | AnyURI   | Identifier of the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPC is of the case; for a case-to-pallet aggregation, the EPC is of the pallet). See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>4</sup>                                                                                                         |
|              |           |           |                  | childEPCs           | 1...1<br>-    | -        | <b>Required.</b> Contains a list of identifiers, including the child items, in the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPCs are of the items; for a case-to-pallet aggregation, the EPCs are of the cases).                                                                                                           |
|              |           |           |                  |                     |               |          |                                                                                                                                                                                                                                                                                                                                                                               |
|              |           |           |                  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>5</sup>                                                                                                                                                                                                |
|              |           |           |                  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The action taken in the message. The <b>action</b> value must equal <b>ADD</b> for an aggregation event. <sup>6</sup> See the <a href="#">ActionType</a> enumeration list for valid values.                                                                                                                                                                  |

<sup>1</sup>2013-10-01T22:08:02Z<sup>2</sup>2013-10-01T22:08:02Z<sup>3</sup>-04:00<sup>4</sup>urn:epc:id:sgtin:088202.5503022.1000000000670<sup>5</sup>urn:epc:id:sscc:088202.002000000034<sup>6</sup>ADD

| Data Element |  |  |  |                               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|--|-------------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizStep                       | 1...1<br>0/*  | String | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value must equal <a href="#">urn:epcglobal:cbv:bizstep:packing</a> for an aggregation event. <sup>1</sup>                                                                                       |
|              |  |  |  | disposition                   | 1...1<br>0/*  | String | <b>Required.</b> The status of the message. It is grouped with the <b>bizStep</b> and <b>action</b> fields to define the message event. The <b>disposition</b> value must equal <a href="#">urn:epcglobal:cbv:disp:in_progress</a> for an aggregation event. <sup>2</sup> |
|              |  |  |  | readPoint                     | 0...1<br>-    | -      | Location where the event occurred, i.e. the warehouse SGLN location ID and storage location (shelf, bin, etc.) in URN format, that recorded the aggregation event.                                                                                                        |
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI | The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>3</sup>                                                                                                                             |
|              |  |  |  | bizLocation                   | 1...1<br>-    | -      | <b>Required.</b> Location of item after the event has occurred.                                                                                                                                                                                                           |
|              |  |  |  | id                            | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a finer-grain location identifier. <sup>4</sup>                                                                                                             |
|              |  |  |  | extension                     | 0...1<br>-    | -      | Not used - GS1 Reserved.                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:locationId                 | 0...1<br>0/*  | String | Location to associate the aggregation. <sup>5</sup>                                                                                                                                                                                                                       |
|              |  |  |  | @type                         | 0...1<br>0/*  | String | <b>Required.</b> Attribute that identifies the location types. <sup>6</sup><br>See the <a href="#">LocationIdType</a> enumeration list for valid values.                                                                                                                  |
|              |  |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -      | Contains the extensions used for the aggregation event.                                                                                                                                                                                                                   |
|              |  |  |  | tl:packedStatus               | 0...1<br>0/*  | String | Packed status of the item or container using the supported enumeration values. <sup>7</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                    |

<sup>1</sup>urn:epcglobal:cbv:bizstep:packing<sup>2</sup>urn:epcglobal:cbv:disp:in\_progress<sup>3</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>4</sup>urn:epc:id:sgln:0614141.12345.1400<sup>5</sup>urn:epc:id:sgln:0614141.12345.1400<sup>6</sup>GLN<sup>7</sup>FULL

| Data Element |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--|------------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:quantity                  | 0...*<br>–    | Integer | The quantity of child serial numbers aggregated to the parent container in this aggregation event. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | tl:resetContainerAggregation | 0...1<br>–    | Boolean | Triggers backend processing on aggregation that will disaggregate existing child items from parent container that are not present in the new childEPC list, and aggregate new child items that are present in the new childEPC list. Default value is <code>false</code> .<br><br>If this field is not populated, TL will not trigger the backend reset of the aggregation. The logic will only be triggered if <b>resetContainerAggregation</b> is set to <code>true</code> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:extensionField            | 0...*<br>–    | –       | Customer extension point to pass in 1 or more name/value pairs containing additional data attributes not already supported in this message.<br>If this element group is populated, both the <b>FieldName</b> and <b>FieldValue</b> elements must be populated.<br><br><div> These extensions are not stored by TraceLink and are used only for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message, such as when a CMO is required to provide additional data fields to the brand owner. Different trade partners may have different field requirements and may therefore require that the <b>ExtensionField</b> be populated differently per trade partner.</div> |
|              |  |  |  |  | tl:fieldName                 | 1...1<br>1/*  | String  | <b>Required.</b> Field name provided by the trade partner that will be receiving the mapped outbound message. The field name must match the field name provided by the trade partner exactly, including case, so that it can be properly detected in the outbound mapping. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:fieldValue                | 1...1<br>1/*  | String  | <b>Required.</b> Field value content that corresponds to the <b>FieldName</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<epcis:EPCISDocument xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
  xmlns:epcglobal="urn:epcglobal:xsd:1" schemaVersion="1.2" creationDate="2018-04-30T22:08:02Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
```

<sup>1</sup>100<sup>2</sup>false<sup>3</sup>NDC\_CODE<sup>4</sup>12345678901

```

<sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
<sbdh:Sender>
  <sbdh:Identifier Authority="GLN">6667771013655</sbdh:Identifier>
</sbdh:Sender>
<sbdh:Receiver>
  <sbdh:Identifier Authority="GLN">8887771013655</sbdh:Identifier>
</sbdh:Receiver>
<sbdh:DocumentIdentification>
  <sbdh:Standard>EPCglobal</sbdh:Standard>
  <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
  <sbdh:InstanceIdentifier>2019-06-14T18:45:20.0Z</sbdh:InstanceIdentifier>
  <sbdh:Type>Events</sbdh:Type>
  <sbdh:CreationDateAndTime>2019-06-14T18:45:20.0Z</sbdh:CreationDateAndTime>
</sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <AggregationEvent>
      <eventTime>2019-06-14T18:45:20.0Z</eventTime>
      <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
      <parentID>urn:epc:id:sscc:088202.0401034.00200000034</parentID>
      <childEPCs>
        <epc>urn:epc:id:sgtin:005434.40000000019</epc>
      </childEPCs>
      <action>ADD</action>
      <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
      <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
      <readPoint>
        <id>urn:epc:id:sgln:6667771.01365.0</id>
      </readPoint>
      <bizLocation>
        <id>urn:epc:id:sgln:6667771.01365.0</id>
      </bizLocation>
      <tl:locationId type="DUNS">810040867</tl:locationId>
      <tl:aggregationEventExtensions>
        <tl:packedStatus>FULL</tl:packedStatus>
        <tl:quantity>1000</tl:quantity>
        <tl:resetContainerAggregation>false</tl:resetContainerAggregation>
        <tl:extensionField>

```

```

        <tl:fieldName>NDC_CODE</tl:fieldName>
        <tl:fieldValue>12345678901</tl:fieldValue>
    </tl:extensionField>
</tl:aggregationEventExtensions>
</AggregationEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                        | Error Message                                                                           | Description                                                                                         |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                                      |                                                                                         |                                                                                                     |
| action                                              | Action ADD is required for is required for the AggregationEvent !!!                     | The error occurs if the source does not equal "ADD".                                                |
| bizLocation   <b>id</b>                             | Event location in the aggregation event is required !!!                                 | The error occurs if the source is empty or null.                                                    |
| bizStep                                             | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!      | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing".                  |
| EventList                                           | At least one object for aggregation is required !!!                                     | The error occurs if no Object Event is present.                                                     |
| tl:locationId   <b>@type</b>                        | Valid location identifier type is required if location ID is populated !!!              | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| disposition                                         | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".                 |
| epc                                                 | Invalid EPC format !!!                                                                  | The error occurs if the source could not be translated.                                             |
|                                                     | Invalid EPC format !!!                                                                  | The error occurs if the source is invalid.                                                          |
| parentID                                            | Invalid EPC format !!!                                                                  | The error occurs if the source cannot be translated.                                                |
|                                                     | Invalid EPC format !!!                                                                  | The error occurs if the source is invalid.                                                          |
| sbdh:Receiver   sbdh:Identifier   <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!                                     | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| sbdh:Sender   sbdh:Identifier   <b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!                                       | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| tl:fieldName                                        | Field name is required if ExtensionField group present in source !!!                    | The error occurs if the source is empty or null.                                                    |



| Data Element                                                                                                                                                      | Error Message                                                         | Description                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------|
| tl:fieldValue                                                                                                                                                     | Field value is required if ExtensionField group present in source !!! | The error occurs if the source is empty or null. |
| Class 2                                                                                                                                                           |                                                                       |                                                  |
| -                                                                                                                                                                 | -                                                                     | -                                                |
| Class 3                                                                                                                                                           |                                                                       |                                                  |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                       |                                                  |

## Aggregate (SOAP)

### Aggregate Request

#### Guidelines

❗ When sending multiple aggregation events (i.e. aggregations, disaggregations, or a combination thereof) at the same time, use the [Aggregation Update](#) message instead of individual Aggregation or Disaggregation messages.

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

The following data is sent in the request to TraceLink:

| Data Element     | Occurs Length | Type | Description                                                  |
|------------------|---------------|------|--------------------------------------------------------------|
| soapenv:Envelope | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element.                 |
| soapenv:Header   | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Header. Not used by TraceLink. |
| soapenv:Body     | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Body.                          |
| urn:Aggregate    | 1...1         | -    | <b>Required.</b> Aggregate Message.                          |

| Data Element |  |  |                  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | AggregateRequest | 0...1<br>-    | -       | <p><b>Required.</b> The aggregate request message to associate child serial numbers to a parent container. See the <b>Strict</b> element at the bottom of the table for important configuration information.</p> <ul style="list-style-type: none"> <li>If <b>true</b>, then the aggregated item(s) must not already have a parent. If they do, an error is returned.</li> <li>If <b>false</b>, items are re-associated to the new parent and the previous aggregations are adjusted (the system performs an implicit disaggregation and then aggregates the items).</li> </ul> |
|              |  |  | Container        | 1...1<br>-    | -       | <b>Required.</b> Parent container serial information. If the container is specified, all items must currently be a child of the specified container.                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | @sn              | 1...1<br>1/*  | String  | <b>Required.</b> The parent container's serial number. See <a href="#">Serial Number Data Examples</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | @namespace       | 0...1<br>1/*  | String  | Not currently supported by TraceLink. Leave this field blank.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | Items            | 1...1<br>-    | -       | <b>Required.</b> Child serial information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | Item             | 1...<br>-     | -       | <b>Required.</b> A list of one or more child serial numbers to aggregate to the parent container's serial number.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | @sn              | 1...1<br>1/*  | String  | <b>Required.</b> A child serial number. See <a href="#">Serial Number Data Examples</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | @namespace       | 0...1<br>1/*  | String  | Not currently supported by TraceLink. Leave this field blank.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | EventDateTime    | 0...1<br>-    | Date    | The date and time of the aggregation event in XSD Date format in GMT. If omitted, the system will record the current date-time.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | LocationType     | 0...1<br>1/*  | String  | The type of location where the event occurred. See the <a href="#">LocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | Location         | 0...1<br>1/*  | String  | <p>The site-level location identifier where the event occurred.</p> <div>  In most cases, this value is an SGLN, the format for which must be the numeric component only, with the urn prefix stripped (e.g. <b>8888882.02867.0</b> instead of <b>urn:epc:id:sgln:8888882.02867.0</b> typically found in EPCIS events). </div>                                                                                                                                                               |
|              |  |  | Strict           | 1...1<br>-    | Boolean | <b>Required.</b> A flag that determines if the system performs an implicit disaggregation and then aggregates the items:                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Data Element |  |  |  |                  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                  |               |         | <ul style="list-style-type: none"> <li>If <b>true</b>, then the aggregated item(s) must not already have a parent. If they do, an error will be returned.</li> <li>If <b>false</b>, then the items are re-associated to the new parent and the items' previous aggregations are adjusted.</li> </ul>                                                                                                                                                   |
|              |  |  |  | ResetAggregation | 0...1<br>-    | Boolean | <p>A flag indicating to disaggregate all existing items in a container and aggregate the new set of items into that container.</p> <ul style="list-style-type: none"> <li>If <b>true</b>, TraceLink disaggregates all existing items in the specified container and aggregates the new set of items into that container.</li> <li>If <b>false</b> (default), TraceLink does not disaggregate all existing items in the specified container.</li> </ul> |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:Aggregate>
      <AggregateRequest>
        <Container sn="00008820200000047506"/>
        <Items>
          <Item sn="015088202503022521100000090109"/>
          <Item sn="015088202503022521100000090110"/>
        </Items>
        <EventDateTime>2015-06-01T17:10:16Z</EventDateTime>
        <LocationType>SGLN</LocationType>
        <Location>8888882.02867.0</Location>
        <Strict>false</Strict>
      </AggregateRequest>
    </urn:Aggregate>
  </soapenv:Body>
</soapenv:Envelope>
```

## Errors

| Exception Code        | Exception Message                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| AGGREGATIONUOMFAILURE | Cannot aggregate serial number <serial number> with UOM <unit of measure> into serial number <serial number> with UOM <unit of measure>. |

| Exception Code           | Exception Message                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALREADYAGGREGATED        | Serial number <serial number> is already aggregated to <serial number>.                                                                                             |
| BADAGGREAGTEDATE         | Operation could not be performed because event time stamp is earlier than the commission date for serial number <serial number>.                                    |
| BADITEMSTATE             | Cannot perform operation on serial number <serial number> with item state <item state> This operation can only be performed when the serial number is <item state>. |
| EVENTTIMEAFTERNOW        | Event time stamp must not be in the future.                                                                                                                         |
| EVENTTIMEBEFORELASTEVENT | Event time stamp is earlier than the last event for serial number <serial number>.                                                                                  |
| INTERNALERROR            | Found more than one serial number for <serial number>.                                                                                                              |
| INTERNALERROR            | Internal error from server: <server information>.                                                                                                                   |
| NOTCOMMISSIONED          | Serial Number <serial number> is not commissioned.                                                                                                                  |
| NOTCOMMISSIONEDLOCATION  | Serial Number <serial number> was not commissioned at this location.                                                                                                |
| NOTVALIDLOCATION         | Location <location> was not valid for serial number <serial number>.                                                                                                |
| SNNOTFOUND               | Serial Number <serial number> does not exist.                                                                                                                       |
| SOMDUPLICATESNS          | The following serial numbers were listed more than once: <serial number>.                                                                                           |

## Aggregate Response

### Guidelines

The following data is included in the message response:

| Data Element          | Occurs Length | Type | Description                                  |
|-----------------------|---------------|------|----------------------------------------------|
| S:Envelope            | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element. |
| S:Body                | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Body.          |
| ns2:AggregateResponse | 1...1<br>-    | -    | <b>Required.</b> Aggregate response message. |
| TLResponse            | 0...1         | -    | <b>Required.</b> The TraceLink response.     |

| Data Element |  |  |  |  |                  | Occurs Length | Type   | Description                                                                                                    |
|--------------|--|--|--|--|------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | Success          | 0...1<br>-    | -      | <b>Required.</b> Indicates if the Aggregation request successfully processed. <sup>1</sup>                     |
|              |  |  |  |  | ExceptionReturn  | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>Success</b> = <b>false</b> ; omitted otherwise. Error information.         |
|              |  |  |  |  | CallException    | 1...*<br>-    | -      | <b>Required.</b> Error information including the exception code and error message if available.                |
|              |  |  |  |  | ExceptionCode    | 0...1<br>0/*  | String | <b>Required.</b> Error code.                                                                                   |
|              |  |  |  |  | ExceptionMessage | 0...1<br>0/*  | String | <b>Conditionally required</b> if error condition is available. Message that further describes error condition. |

## Example

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:AggregateResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns2:AggregateResponse>
  </S:Body>
</S:Envelope>
```

## Aggregation Update (XML)

### Guidelines

Use this message to capture both aggregation and disaggregation events simultaneously. If the items being disaggregated have a Russia target market, this message initiates the [913 - Unit Extract](#) report in addition to the [911 - Unit Pack](#) and [914 - Unit Append](#) reports.

<sup>1</sup>true

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_AGGREGATE\_UPDATE

**Info Exchange Display Name:** Aggregate Update

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

❗ The MDLP Bulk API currently has a limit of 20 events per message.

| Data Element                    |                       |                        | Occurs Length | Type   | Description                                                                                                                        |
|---------------------------------|-----------------------|------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------|
| som:SOMAggregationUpdateMessage |                       |                        | 1...1<br>-    | -      | <b>Required.</b> The TL XML message root element.                                                                                  |
|                                 | som:ControlFileHeader |                        | 1...1<br>-    | -      | <b>Required.</b> The message document's header information.                                                                        |
|                                 |                       | cmn:FileSenderNumber   | 1...1<br>1/20 | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup>                                                         |
|                                 |                       | cmn:FileReceiverNumber | 1...1<br>1/20 | String | <b>Required.</b> The company identifier of the file's recipient. <sup>2</sup>                                                      |
|                                 |                       | cmn:FileControlNumber  | 1...1<br>1/*  | String | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>3</sup> |
|                                 |                       | cmn:FileDate           | 1...1<br>1/*  | Date   | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>4</sup>               |

<sup>1</sup>8888882028655

<sup>2</sup>8888882028677

<sup>3</sup>20190920-LD3

<sup>4</sup>2019-09-20

| Data Element |                         |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                |
|--------------|-------------------------|--|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | cmn:FileTime            |  | 1...1<br>1/*  | Time     | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>1</sup> |
|              | som:MessageBody         |  | 1...1<br>-    | -        | <b>Required.</b> Aggregation Update message details.                                                                                                                                                                                       |
|              | choice%1                |  | 1...*<br>-    | -        | <b>Required.</b> Looping choice element. At least one instance of either <b>cmn:Aggregation</b> or <b>cmn:Disaggregation</b> is required.                                                                                                  |
|              | cmn:Aggregation         |  | 0...1<br>-    | -        | <b>Conditionally required</b> if <b>cmn:Disaggregation</b> is not present. Aggregation group header.                                                                                                                                       |
|              | cmn:EventDateTime       |  | 1...1<br>0/*  | DateTime | <b>Required.</b> Timestamp of the date and time of the product release with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. <sup>2</sup>                                                                                     |
|              | cmn:EventTimeZoneOffset |  | 1...1<br>6/6  | String   | <b>Required.</b> The time zone offset in effect where the packaging occurs. Default value is "+00:00". <sup>3</sup>                                                                                                                        |
|              | cmn:EventLocation       |  | 1...1<br>0/34 | String   | <b>Required.</b> Business or location identifier for the entity that is importing the products. <sup>4</sup>                                                                                                                               |
|              | cmn:EventLocationType   |  | 1...1<br>1/*  | String   | <b>Required.</b> Business or location type for the entity that is importing the product. <sup>5</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                  |
|              | cmn:PlantLocationId     |  | 0...1<br>0/34 | String   | Plant location identifier if present. <sup>6</sup>                                                                                                                                                                                         |
|              | cmn:ProductionLineId    |  | 0...1<br>0/*  | String   | The name of the production line where the packaging occurs. <sup>7</sup>                                                                                                                                                                   |
|              | cmn:LineManagerName     |  | 0...1<br>0/*  | String   | The name of the line or production manager who is on shift when the batch is produced. <sup>8</sup>                                                                                                                                        |

<sup>1</sup>04:30:32Z<sup>2</sup>2019-09-20T04:30:32.12Z<sup>3</sup>+00:00<sup>4</sup>0333331013655<sup>5</sup>GLN<sup>6</sup>0333331013655<sup>7</sup>12436587<sup>8</sup>Fred Bobbit

| Data Element |  |  |                    | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:ParentSerial   | 1...1<br>1/*  | String  | <b>Required.</b> Parent serial number for aggregation expressed in GS1 Application Identifier format, without parentheses, for the AI keys. AI(01)(21) formatted serial numbers for GTINs or AI(00) formatted serial number for SSCCs, without parentheses. Express non-GS1 serial numbers (e.g. China) in native format. <sup>1</sup> |
|              |  |  | @companyPrefix     | 0...1<br>0/*  | String  | <b>Conditionally required</b> if commissioning a new SSCC. The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                             |
|              |  |  | @filterValue       | 0...1<br>0/*  | String  | <b>Conditionally required</b> if commissioning a new SSCC. The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                   |
|              |  |  | @format            | 0...1<br>0/*  | String  | <b>Conditionally required</b> if commissioning a new SSCC. Identifies the serial number format. See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                      |
|              |  |  | cmn:PackedStatus   | 0...1<br>0/*  | String  | The packed status of the item or container. <sup>2</sup> See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                                                       |
|              |  |  | cmn:PackagingLevel | 0...1<br>0/*  | String  | The packaging level of the item. <sup>3</sup> See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                                                                                                                |
|              |  |  | cmn:Quantity       | 0...1<br>-    | Integer | Quantity of serial numbers reported. <sup>4</sup>                                                                                                                                                                                                                                                                                      |
|              |  |  | cmn:NumberList     | 1...1<br>-    | -       | <b>Required.</b> List of serial numbers for the items in the parent container.                                                                                                                                                                                                                                                         |
|              |  |  | cmn:Serial         | 1...*<br>1/*  | String  | <b>Required.</b> Serial number expressed in GS1 Application Identifier format, without parentheses, for the AI keys. AI(01)(21) formatted serial numbers for GTINs or AI(00) formatted serial number for SSCCs, without parentheses. Express non-GS1 serial numbers (e.g. China) in native format. <sup>5</sup>                        |
|              |  |  | @companyPrefix     | 0...1<br>0/*  | String  | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                        |
|              |  |  | @filterValue       | 0...1<br>0/*  | String  | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                              |

<sup>1</sup>015088202501033321100000060001<sup>2</sup>FULL<sup>3</sup>CA<sup>4</sup>10<sup>5</sup>015088202501033321100000060002



| Data Element |  |  |                               |               |               | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|-------------------------------|---------------|---------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                               |               | @format       | 0...1<br>0/*  | String  | Identifies the serial number format.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |                               |               | @packedStatus | 0...1<br>0/*  | String  | The packed status of the item or container. <sup>1</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | cmn:ResetContainerAggregation |               |               | 0...1<br>-    | Boolean | Flag that tells TraceLink what to do if serial numbers already exist in the parent container.<br>Valid values: <sup>2</sup> <ul style="list-style-type: none"> <li><b>true</b> – The existing child items that are not present in the new <b>cmn:NumberList</b> are disaggregated from their parent container.</li> <li><b>false</b> (default) – The existing child items that are not present in the new <b>cmn:NumberList</b> are retained in the parent container.</li> </ul>                                        |
|              |  |  | cmn:DisaggregateFromParent    |               |               | 1...1<br>-    | Boolean | <b>Required.</b> Flag that tells TraceLink whether or not to automatically disaggregate child serial numbers from their existing parent container.<br>Valid values: <sup>3</sup> <ul style="list-style-type: none"> <li><b>true</b> – The existing aggregation of the child items is adjusted and the items are aggregated to the new parent container.</li> <li><b>false</b> – The existing aggregation of the child items is not adjusted and the items are not disaggregated from their parent container.</li> </ul> |
|              |  |  | cmn:ExtensionField            |               |               | 0...*<br>-    | -       | Extension to pass one or more name value pairs containing additional data attributes that are not already supported in this message.<br><br><div>  The <b>tl:extensionField</b> element group is not stored by TraceLink, and is used only when a trade partner requires additional information (e.g. when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer). </div>                           |
|              |  |  |                               | cmn:FieldName |               | 1...1<br>1/*  | String  | <b>Required.</b> Populate with the field name provided by the trade partner that receives the outbound message.<br><br><div>  <b>cmn:FieldName</b> is case sensitive and must match the field name provided by the trade partner exactly. </div>                                                                                                                                                                                    |

<sup>1</sup>FULL<sup>2</sup>true<sup>3</sup>true

| Data Element |  |                    |  |                         | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                              |
|--------------|--|--------------------|--|-------------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                    |  | cmn:FieldValue          | 1...1<br>1/*  | String   | <b>Required.</b> The field value that corresponds to <b>cmn:FieldName</b> .                                                                                                                                                                                                                                              |
|              |  | cmn:Disaggregation |  |                         | 0...1<br>-    | -        | Disaggregation group header.                                                                                                                                                                                                                                                                                             |
|              |  |                    |  | cmn:EventDateTime       | 1...1<br>0/*  | DateTime | <b>Required.</b> Timestamp of the date and time of the product release with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. <sup>1</sup>                                                                                                                                                                   |
|              |  |                    |  | cmn:EventTimeZoneOffset | 1...1<br>6/6  | String   | <b>Required.</b> The time zone offset in effect where the packaging occurs. Default value is "+00:00". <sup>2</sup>                                                                                                                                                                                                      |
|              |  |                    |  | cmn:EventLocation       | 1...1<br>0/34 | String   | <b>Required.</b> Business or location identifier for the entity that is importing the products. <sup>3</sup>                                                                                                                                                                                                             |
|              |  |                    |  | cmn:EventLocationType   | 1...1<br>1/*  | String   | <b>Required.</b> Business or location type for the entity that is importing the products. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                               |
|              |  |                    |  | cmn:ParentSerial        | 0...1<br>0/*  | String   | Parent serial number for aggregation expressed in GS1 Application Identifier format, without parentheses, for the AI keys. AI (01)AI(21) formatted serial numbers for GTINs or AI(00) formatted serial number for SSCCs, without parentheses. Express non-GS1 serial numbers (e.g. China) in native format. <sup>5</sup> |
|              |  |                    |  | @companyPrefix          | 0...1<br>0/*  | String   | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                          |
|              |  |                    |  | @filterValue            | 0...1<br>0/*  | String   | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                |
|              |  |                    |  | @format                 | 0...1<br>0/*  | String   | Identifies the serial number format.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                |
|              |  |                    |  | cmn:NumberList          | 1...1<br>-    | -        | <b>Required.</b> List of serial numbers for the items in the parent container.                                                                                                                                                                                                                                           |

<sup>1</sup>2019-09-20T06:30:32.12Z<sup>2</sup>+00:00<sup>3</sup>0333331013655<sup>4</sup>GLN<sup>5</sup>015088202501033321100000060030

| Data Element |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:Serial         | 1...*<br>1/*  | String | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI(01)(21) formatted serial number for GTINs or AI(00) formatted serial number for SSCCs. Non-GS1 serial numbers (e.g. China) are expressed in native format. <sup>1</sup>                                                                                                                                                                                            |
|              |  |  |  | @companyPrefix     | 0...1<br>0/*  | String | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | @filterValue       | 0...1<br>0/*  | String | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | @format            | 0...1<br>0/*  | String | Identifies the serial number format.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | @packedStatus      | 0...1<br>0/*  | String | The packed status of the item or container. <sup>2</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | cmn:ExtensionField | 0...*<br>-    | -      | Extension to pass one or more name value pairs containing additional data attributes that are not already supported in this message.<br><br><div>  The <b>tl:extensionField</b> element group is not stored by TraceLink, and is used only when a trade partner requires additional information (e.g. when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer). </div> |
|              |  |  |  | cmn:FieldName      | 1...1<br>1/*  | String | <b>Required.</b> Populate with the field name provided by the trade partner that receives the outbound message.<br><br><div>  <b>cmn:FieldName</b> is case sensitive and must match the field name provided by the trade partner exactly. </div>                                                                                                                                                           |
|              |  |  |  | cmn:FieldValue     | 1...1<br>1/*  | String | <b>Required.</b> The field value that corresponds to <b>cmn:FieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMAggregationUpdateMessage xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
```

<sup>1</sup>015088202501033321100000060031

<sup>2</sup>FULL

```

<cmn:FileSenderNumber>8888882028644</cmn:FileSenderNumber>
<cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
<cmn:FileControlNumber>20130821065245</cmn:FileControlNumber>
<cmn:FileDate>2019-09-20</cmn:FileDate>
<cmn:FileTime>06:52:45.02Z</cmn:FileTime>
</som:ControlFileHeader>
<som:MessageBody>
  <som:Aggregation>
    <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <cmn:PlantLocationId>0333331013655</cmn:PlantLocationId>
    <cmn:ProductionLineId>12436587</cmn:ProductionLineId>
    <cmn:LineManagerName>Fred Bobbit</cmn:LineManagerName>
    <cmn:ParentSerial>015088202501033321100000060001</cmn:ParentSerial>
    <cmn:PackedStatus>FULL</cmn:PackedStatus>
    <cmn:PackagingLevel>CA</cmn:PackagingLevel>
    <cmn:Quantity>20</cmn:Quantity>
    <cmn:NumberList>
      <cmn:Serial>015088202501033321100000060002</cmn:Serial>
      <cmn:Serial>015088202501033321100000060003</cmn:Serial>
      <cmn:Serial>015088202501033321100000060004</cmn:Serial>
      <cmn:Serial>015088202501033321100000060005</cmn:Serial>
      <cmn:Serial>015088202501033321100000060006</cmn:Serial>
      <cmn:Serial>015088202501033321100000060007</cmn:Serial>
      <cmn:Serial>015088202501033321100000060008</cmn:Serial>
      <cmn:Serial>015088202501033321100000060009</cmn:Serial>
    </cmn:NumberList>
    <cmn:ResetContainerAggregation>true</cmn:ResetContainerAggregation>
    <cmn:DisaggregateFromParent>true</cmn:DisaggregateFromParent>
  </som:Aggregation>
  <som:Aggregation>
    <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <cmn:PlantLocationId>0333331013655</cmn:PlantLocationId>
    <cmn:ProductionLineId>12436587</cmn:ProductionLineId>
    <cmn:LineManagerName>Fred Bobbit</cmn:LineManagerName>

```

```

<cmn:ParentSerial>015088202501033321100000060010</cmn:ParentSerial>
<cmn:PackedStatus>FULL</cmn:PackedStatus>
<cmn:PackagingLevel>CA</cmn:PackagingLevel>
<cmn:Quantity>20</cmn:Quantity>
<cmn:NumberList>
  <cmn:Serial>015088202501033321100000060011</cmn:Serial>
  <cmn:Serial>015088202501033321100000060012</cmn:Serial>
  <cmn:Serial>015088202501033321100000060013</cmn:Serial>
  <cmn:Serial>015088202501033321100000060014</cmn:Serial>
  <cmn:Serial>015088202501033321100000060015</cmn:Serial>
  <cmn:Serial>015088202501033321100000060016</cmn:Serial>
  <cmn:Serial>015088202501033321100000060017</cmn:Serial>
  <cmn:Serial>015088202501033321100000060018</cmn:Serial>
</cmn:NumberList>
<cmn:ResetContainerAggregation>true</cmn:ResetContainerAggregation>
<cmn:DisaggregateFromParent>true</cmn:DisaggregateFromParent>
</som:Aggregation>
<som:Aggregation>
  <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
  <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
  <cmn:EventLocation>0333331013655</cmn:EventLocation>
  <cmn:EventLocationType>GLN</cmn:EventLocationType>
  <cmn:PlantLocationId>0333331013655</cmn:PlantLocationId>
  <cmn:ProductionLineId>12436587</cmn:ProductionLineId>
  <cmn:LineManagerName>Fred Bobbit</cmn:LineManagerName>
  <cmn:ParentSerial>015088202501033321100000060051</cmn:ParentSerial>
  <cmn:PackedStatus>FULL</cmn:PackedStatus>
  <cmn:PackagingLevel>CA</cmn:PackagingLevel>
  <cmn:Quantity>20</cmn:Quantity>
  <cmn:NumberList>
    <cmn:Serial>015088202501033321100000060052</cmn:Serial>
    <cmn:Serial>015088202501033321100000060053</cmn:Serial>
    <cmn:Serial>015088202501033321100000060054</cmn:Serial>
    <cmn:Serial>015088202501033321100000060055</cmn:Serial>
    <cmn:Serial>015088202501033321100000060056</cmn:Serial>
    <cmn:Serial>015088202501033321100000060057</cmn:Serial>
    <cmn:Serial>015088202501033321100000060058</cmn:Serial>
    <cmn:Serial>015088202501033321100000060059</cmn:Serial>
  </cmn:NumberList>
  <cmn:ResetContainerAggregation>true</cmn:ResetContainerAggregation>

```

```

    <cmn:DisaggregateFromParent>true</cmn:DisaggregateFromParent>
  </som:Aggregation>
  <som:Disaggregation>
    <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <cmn:ParentSerial>015088202501033321100000060020</cmn:ParentSerial>
    <cmn:NumberList>
      <cmn:Serial>015088202501033321100000060021</cmn:Serial>
      <cmn:Serial>015088202501033321100000060022</cmn:Serial>
    </cmn:NumberList>
  </som:Disaggregation>
  <som:Disaggregation>
    <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:02</cmn:EventTimeZoneOffset>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <cmn:ParentSerial>015088202501033321100000060030</cmn:ParentSerial>
    <cmn:NumberList>
      <cmn:Serial>015088202501033321100000060031</cmn:Serial>
      <cmn:Serial>015088202501033321100000060032</cmn:Serial>
    </cmn:NumberList>
  </som:Disaggregation>
</som:MessageBody>
</som:SOMAggregationUpdateMessage>

```

## Errors

| Data Element                                   | Error Message                                                                 | Description                                                                                         |
|------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                                 |                                                                               |                                                                                                     |
| choice%1                                       | At least one instance of either Aggregation or Disaggregation is required !!! | The error occurs if cmn:Aggregation and cmn:Disaggregation are both empty or null.                  |
| cmn:Aggregation   <b>cmn:EventLocation</b>     | Event location is required !!!                                                | The error occurs if the source is empty or null.                                                    |
| cmn:Aggregation   <b>cmn:EventLocationType</b> | Valid event location type is required !!!                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| cmn:Aggregation   <b>cmn:ParentSerial</b>      | Parent serial number is required !!!                                          | The error occurs if the source is empty or null.                                                    |

| Data Element                                                      | Error Message                                                            | Description                                                                                         |
|-------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| cmn:Aggregation   cmn:ParentSerial   <b>@format</b>               | Valid format code is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Aggregation   cmn:ParentSerial   <b>cmn:PackedStatus</b>      | Valid packaging level code is required !!!                               | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:PackagingLevel                                                | Valid packaging level code is required !!!                               | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Aggregation   cmn:NumberList   <b>cmn:Serial</b>              | Serial number is required !!!                                            | The error occurs if the source is empty or null.                                                    |
| cmn:Aggregation   cmn:NumberList   cmn:Serial   <b>@format</b>    | Valid format code is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Aggregation   cmn:ExtensionField   <b>cmn:FieldName</b>       | Field name is required if extension field group present !!!              | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.               |
| cmn:Aggregation   cmn:ExtensionField   <b>cmn:FieldValue</b>      | Field value is required if extension field group present !!!             | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.               |
| cmn:Disaggregation   <b>cmn:EventLocation</b>                     | Event location is required !!!                                           | The error occurs if the source is empty or null.                                                    |
| cmn:Disaggregation   <b>cmn:EventLocationType</b>                 | Valid event location type is required !!!                                | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| cmn:Disaggregation   cmn:ParentSerial   <b>@format</b>            | Valid format code is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Disaggregation   cmn:ParentSerial   <b>cmn:PackedStatus</b>   | Valid packaging level code is required !!!                               | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Disaggregation   cmn:NumberList   <b>cmn:Serial</b>           | Serial number is required !!!                                            | The error occurs if the source is empty or null.                                                    |
| cmn:Disaggregation   cmn:NumberList   cmn:Serial   <b>@format</b> | Valid format code is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Disaggregation   cmn:ExtensionField   <b>cmn:FieldName</b>    | Field name is required if extension field group present !!!              | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.               |
| cmn:Disaggregation   cmn:ExtensionField   <b>cmn:FieldValue</b>   | Field value is required if extension field group present !!!             | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.               |
| <b>Class 2</b>                                                    |                                                                          |                                                                                                     |
| cmn:Aggregation   <b>cmn:EventDateTime</b>                        | Event timestamp is earlier than the last event for serial number <Serial | The error occurs if the source is before the commission event time for                              |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                    | Description                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   | Number>.                                                                                                                                                                                         | cmn:Aggregation   cmn:NumberList   <b>cmn:Serial</b> .                                                                            |
| cmn:Aggregation   <b>cmn:ParentSerial</b>                                                                                                                         | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                       |
|                                                                                                                                                                   | Parent Serial Number <ParentSerial> was not commissioned at this location.                                                                                                                       | The error occurs if the source was not commissioned at this subscriber location.                                                  |
| cmn:Aggregation   cmn:NumberList   <b>cmn:Serial</b>                                                                                                              | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                       |
|                                                                                                                                                                   | Serial Number <Serial> cannot be aggregated because it was not commissioned for this location.                                                                                                   | The error occurs if the source was not commissioned at this subscriber location.                                                  |
|                                                                                                                                                                   | Cannot aggregate Serial number <Serial> with UOM <PackagingLevelUOM> into Serial Number <ParentSerial> with UOM <PackagingLevelUOM>.                                                             | The error occurs if the source packaging level is larger than the packaging level for cmn:ParentSerial.                           |
| cmn:Disaggregation   <b>cmn:EventDateTime</b>                                                                                                                     | Event timestamp is earlier than the aggregation date for serial number <Serial>.                                                                                                                 | The error occurs if the source is before the aggregation event time for cmn:Disaggregation   cmn:NumberList   <b>cmn:Serial</b> . |
| cmn:Disaggregation   <b>cmn:EventLocation</b>                                                                                                                     | Authorization Response from server: Credentials are required to access this resource.                                                                                                            | The error occurs if the source cannot be found.                                                                                   |
| cmn:Disaggregation   <b>cmn:ParentSerial</b>                                                                                                                      | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                       |
|                                                                                                                                                                   | Serial number <Serial Number> not commissioned.                                                                                                                                                  | The error occurs if the source was not commissioned at this subscriber location.                                                  |
|                                                                                                                                                                   | Cannot perform operation on serial number [Serial Number] with item state [Serial Number Status]. This operation can only be performed when the serial number is Available or Blocked or Picked. | The error occurs if the source is not in an available, blocked, or picked state.                                                  |
|                                                                                                                                                                   | Serial number <Serial Number> does not have any items aggregated to it.                                                                                                                          | The error occurs if the source has no child serial numbers.                                                                       |
| cmn:Disaggregation   cmn:NumberList   <b>cmn:Serial</b>                                                                                                           | Serial Number <Serial> cannot be disaggregated because it was not previously aggregated to <ParentSerial>.                                                                                       | The error occurs if the source is not a child of cmn:Disaggregation   <b>cmn:ParentSerial</b> .                                   |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                  |                                                                                                                                   |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                  |                                                                                                                                   |



# Aggregation Update (EPCIS v1.2)

## Guidelines

Use this message to capture both aggregation and disaggregation events simultaneously. If the items being disaggregated have a Russia target market, this message initiates the [913 - Unit Extract](#) report in addition to the [911 - Unit Pack](#) and [914 - Unit Append](#) reports.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_AGGREGATE\_UPDATE

**Info Exchange Display Name:** Aggregate Update

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

❗ The MDLP Bulk API currently has a limit of 20 events per message.

| Data Element        | Occurs Length | Type     | Description                                                                                                                                  |
|---------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument | 1..1<br>-     | -        | <b>Required.</b> EPCIS message root element.                                                                                                 |
| @schemaVersion      | 1..1<br>0/*   | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup> |
| @creationDate       | 1..1<br>1/*   | DateTime | Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                 |
| EPCISHeader         | 0..1<br>-     | -        | <b>Required.</b> The XML file control header.                                                                                                |

<sup>1</sup>1.2

<sup>2</sup>2019-10-18T22:08:02Z

| Data Element |  |  |  |                                     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|-------------------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | sbdh:StandardBusinessDocumentHeader | 1...1<br>-    | -      | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | sbdh:HeaderVersion                  | 1...1<br>0/*  | String | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <b>1.0</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | sbdh:Sender                         | 1...*<br>-    | -      | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | sbdh:Identifier                     | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. Send SGLN and all other party types with the GS1-conformant URI prefix. For example:<sup>2</sup></p> <ul style="list-style-type: none"> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> <li><a href="urn:epc:id:sgln:088202.867701.0">urn:epc:id:sgln:088202.867701.0</a></li> </ul> <p> GLNs do not have a urn or http prefix.</p>   |
|              |  |  |  | @Authority                          | 1...1<br>1/*  | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>3</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                         |
|              |  |  |  | sbdh:Receiver                       | 1...*<br>-    | -      | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | sbdh:Identifier                     | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. Send SGLN and all other party types with the GS1-conformant URI prefix. For example:<sup>4</sup></p> <ul style="list-style-type: none"> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> <li><a href="urn:epc:id:sgln:088202.867701.0">urn:epc:id:sgln:088202.867701.0</a></li> </ul> <p> GLNs do not have a urn or http prefix.</p> |

<sup>1</sup>1.0<sup>2</sup>1100001014507<sup>3</sup>GLN<sup>4</sup>0614141123452

| Data Element |           |           |                             |                          |            | Occurs Length | Type         | Description                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                               |
|--------------|-----------|-----------|-----------------------------|--------------------------|------------|---------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |           |                             |                          | @Authority | 1...1<br>1/*  | String       | <b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>1</sup><br><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |                                                                                                                                                                                                                                                                                               |
|              |           |           | sbdh:DocumentIdentification |                          |            | 1...1         | -            | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                               |
|              |           |           |                             | sbdh:Standard            |            |               | 1...1<br>0/* | String                                                                                                                                                                                                                                                                                                            | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b> . <sup>2</sup>                                                                                                                                         |
|              |           |           |                             | sbdh:TypeVersion         |            |               | 1...1<br>0/* | String                                                                                                                                                                                                                                                                                                            | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b> . <sup>3</sup>                                 |
|              |           |           |                             | sbdh:InstanceIdentifier  |            |               | 1...1<br>1/* | String                                                                                                                                                                                                                                                                                                            | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>4</sup>                                                       |
|              |           |           |                             | sbdh:Type                |            |               | 1...1<br>0/* | String                                                                                                                                                                                                                                                                                                            | <b>Required.</b> This element identifies the type of the document. The Type must equal <b>Events</b> . <sup>5</sup>                                                                                                                                                                           |
|              |           |           |                             | sbdh:CreationDateAndTime |            |               | 1...1<br>0/* | DateTime                                                                                                                                                                                                                                                                                                          | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>6</sup> |
|              | EPCISBody |           |                             |                          |            | 1...1<br>-    | -            | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                               |
|              |           | EventList |                             |                          |            | 1...1<br>-    | -            | <b>Required.</b> The EventList supports the following events: <ul style="list-style-type: none"><li>• <b>AggregationEvent</b> for aggregation</li><li>• <b>AggregationEvent</b> for disaggregation</li></ul>                                                                                                      |                                                                                                                                                                                                                                                                                               |
|              |           |           | AggregationEvent            |                          |            | 0...*<br>-    | -            | <b>Required.</b> <b>AggregationEvent</b> is used for both aggregation and disaggregation events. The type of event is defined by the following: <ul style="list-style-type: none"><li>• For an aggregation event, the following must be true:</li></ul>                                                           |                                                                                                                                                                                                                                                                                               |

<sup>1</sup>GLN<sup>2</sup>EPCglobal<sup>3</sup>1.0<sup>4</sup>000001<sup>5</sup>Events<sup>6</sup>2019-10-18T22:08:02Z

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|---------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |          | <ul style="list-style-type: none"> <li>• <b>action</b> = <b>ADD</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:packing</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:in_progress</b></li> <li>• For a disaggregation event, the following must be true: <ul style="list-style-type: none"> <li>• <b>action</b> = <b>DELETE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:unpacking</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul> </li> </ul>                                                                                              |
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date or time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of EPCIS1.0.1. The system expects the Z to be appended to the time zone indicator; if it is not present, TraceLink assumes that the time is GMT and therefore appends the Z. <sup>1</sup>                                                                                                                                                                                                                            |
|              |  |  | eventTimeZoneOffset | 1...1<br>0/*  | DateTime | <b>Required.</b> The time zone offset in effect where the packaging occurs. Default value is <b>+00:00</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | parentID            | 1...1<br>1/*  | String   | <p><b>Conditionally required</b> for an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = <b>ADD</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:packing</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:in_progress</b></li> </ul> <p>Identifier of the parent container in EPC Pure Identity URI format.<br/>Examples:<sup>2</sup></p> <ul style="list-style-type: none"> <li>• For an item-to-case aggregation, the EPC of the case.</li> <li>• For a case-to-pallet aggregation, the EPC of the pallet.</li> </ul> |
|              |  |  | childEPCs           | 1...1<br>-    | -        | <p><b>Required.</b> List of identifiers of the child items in the parent container in EPC Pure Identity URI format.<br/>Examples:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>2019-10-18T22:08:02Z<sup>2</sup>urn:epc:id:sgtin:088202.5503022.100000000670

urn:epc:id:sscc:088202.002000000034

http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943

http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002

| Data Element |  |  |  |             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|-------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |             |               |        | <ul style="list-style-type: none"> <li>For an item-to-case aggregation, the EPCs of the items.</li> <li>For a case-to-pallet aggregation, the EPCs of the cases.</li> </ul>                                                                                                                                                 |
|              |  |  |  | epc         | 0...*<br>0/*  | AnyURI | <b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identity URI format. <sup>1</sup>                                                                                                                                                                                                        |
|              |  |  |  | action      | 1...1<br>1/*  | String | <b>Required.</b> The action taken. <sup>2</sup> <ul style="list-style-type: none"> <li>For an aggregation event, <b>action</b> must equal <b>ADD</b>.</li> <li>For a disaggregation event, <b>action</b> must equal <b>DELETE</b>.</li> </ul>                                                                               |
|              |  |  |  | bizStep     | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step. <sup>3</sup> <ul style="list-style-type: none"> <li>For an aggregation event, <b>bizStep</b> must equal <b>urn:epcglobal:cbv:bizstep:packing</b>.</li> <li>For a disaggregation event, <b>bizStep</b> must equal <b>urn:epcglobal:cbv:bizstep:unpacking</b>.</li> </ul>                 |
|              |  |  |  | disposition | 0...1<br>0/*  | AnyURI | <b>Required.</b> The status of the message. <sup>4</sup> <ul style="list-style-type: none"> <li>For an aggregation event, <b>disposition</b> must equal <b>urn:epcglobal:cbv:disp:in_progress</b>.</li> <li>For a disaggregation event, <b>disposition</b> must equal <b>urn:epcglobal:cbv:disp:in_progress</b>.</li> </ul> |
|              |  |  |  | readPoint   | 0...1<br>-    | -      | Refers to the location of where the event occurs.                                                                                                                                                                                                                                                                           |
|              |  |  |  | id          | 0...1<br>0/*  | AnyURI | The SGLN EPC of the location from where the event occurs. <sup>5</sup>                                                                                                                                                                                                                                                      |
|              |  |  |  | bizLocation | 1...1<br>-    | -      | <b>Required.</b> Location of the business.                                                                                                                                                                                                                                                                                  |

<sup>1</sup>urn:epc:id:sgtin:088202.5503022.100000000670

urn:epc:id:sscc:088202.002000000034

http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943

http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002

<sup>2</sup>ADD<sup>3</sup>urn:epcglobal:cbv:bizstep:packing<sup>4</sup>urn:epcglobal:cbv:disp:in\_progress<sup>5</sup>urn:epc:id:sgln:1100001.12345.0

| Data Element |  |  |  |                               |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|-------------------------------|-------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                               | id                | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location where the objects are following the event. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:aggregationEventExtensions |                   | 0...1<br>-    | -      | Extensions for <b>AggregationEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |                               | tl:packedStatus   | 0...1<br>0/*  | String | <p>The packed status of the item or container.<sup>2</sup></p> <p>See the <a href="#">PackedStatus</a> enumeration list for valid values.</p> <div> <p>❗ Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div> |
|              |  |  |  |                               | tl:quantity       | 0...1<br>-    | Int    | <p>The quantity of child serial numbers aggregated to the parent container.<sup>3</sup></p> <div> <p>❗ Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div>                                                   |
|              |  |  |  |                               | tl:filterValue    | 0...1<br>0/*  | String | <b>Conditionally required</b> if commissioning a new SSCC. The filter value used in GTIN-14 and SSCC serial numbers. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |                               | tl:packagingLevel | 0...1<br>0/*  | String | <p>The packaging level of the commissioned item.<sup>5</sup></p> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p> <div> <p>❗ Use for only an aggregation event when aggregating, i.e. when the following is true:</p> </div>                                                                                                                                                                                                      |

<sup>1</sup>urn:epc:id:sgln:1100001.12345.0<sup>2</sup>FULL<sup>3</sup>48<sup>4</sup>1<sup>5</sup>CA

| Data Element |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|------------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                              |               |         | <ul style="list-style-type: none"> <li>• <b>action</b> = "ADD"</li> <li>• <b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li>• <b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | tl:resetContainerAggregation | 0...1<br>-    | Boolean | <p>If set to true, existing child items that are not present in the new <b>childEPCs</b> are disaggregated from their parent container. New child items that are present in the new <b>childEPCs</b> are then aggregated to the parent container.<sup>1</sup></p> <p>If a value is not specified, defaults to false.</p> <p><b>i</b> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = "ADD"</li> <li>• <b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li>• <b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> |
|              |  |  |  | tl:disaggregateFromParent    | 1...1<br>-    | Boolean | <p><b>Required.</b> If set to true, the existing aggregation of the child items is adjusted and the items are aggregated to the new parent container (i.e. TraceLink performs an implicit disaggregation and then aggregates the items).<sup>2</sup></p>                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | tl:plantLocationId           | 0...1<br>0/*  | String  | <p>Plant location identifier.<sup>3</sup></p> <p><b>i</b> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = "ADD"</li> <li>• <b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li>• <b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul>                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:productionLineId          | 0...1<br>0/*  | String  | <p>The name of the production line where the packaging occurs.<sup>4</sup></p> <p><b>i</b> Use for only an aggregation event when aggregating, i.e. when the following is true:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>true<sup>2</sup>true<sup>3</sup>0333331013655<sup>4</sup>12436587

| Data Element |  |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|--------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                    |               |        | <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul>                                                                                                                                                                                                         |
|              |  |  |  |  | tl:lineManagerName | 0...1<br>0/*  | String | <p>The name of the line or production manager who is on shift when the batch is produced.<sup>1</sup></p> <p>❗ Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> |
|              |  |  |  |  | tl:extensionField  | 0...*<br>-    | -      | <p>Extension to pass 1 or more name value pairs containing additional data attributes that are not already supported in this message.</p> <p>❗ The <b>tl:extensionField</b> element group is not stored by TraceLink, and is used only when a trade partner requires additional information (e.g. when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer).</p>              |
|              |  |  |  |  | tl:fieldName       | 1...1<br>1/*  | String | <p><b>Required.</b> Populate with the field name provided by the trade partner that receives the outbound message.</p> <p>❗ <b>tl:fieldName</b> is case sensitive and must match the field name provided by the trade partner exactly.</p>                                                                                                                                                                       |
|              |  |  |  |  | tl:fieldValue      | 1...1<br>1/*  | String | <p><b>Required.</b> The field value that corresponds to the <b>tl:fieldName</b>.</p>                                                                                                                                                                                                                                                                                                                             |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:tl="http://epcis.tracelink.com/ns" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2019-10-18T17:45:20.00Z">
  <EPCISHeader>
```

<sup>1</sup>Fred Bobbit



```

<sbdh:StandardBusinessDocumentHeader>
  <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
  <sbdh:Sender>
    <sbdh:Identifier Authority="GLN">0882028677019</sbdh:Identifier>
  </sbdh:Sender>
  <sbdh:Receiver>
    <sbdh:Identifier Authority="GLN">0333331013655</sbdh:Identifier>
  </sbdh:Receiver>
  <sbdh:DocumentIdentification>
    <sbdh:Standard>EPCglobal</sbdh:Standard>
    <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
    <sbdh:InstanceIdentifier>201901311745200001</sbdh:InstanceIdentifier>
    <sbdh:Type>Events</sbdh:Type>
    <sbdh:CreationDateAndTime>2019-10-18T17:45:20.00Z</sbdh:CreationDateAndTime>
  </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <AggregationEvent>
      <eventTime>2019-10-18T22:08:02Z</eventTime>
      <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
      <parentID>urn:epc:id:sscc:088202.00200000034</parentID>
      <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060001</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060002</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060003</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060004</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060005</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060006</epc>
      </childEPCs>
      <action>ADD</action>
      <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
      <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
      <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
      </bizLocation>
      <tl:aggregationEventExtensions>
        <tl:packedStatus>FULL</tl:packedStatus>
        <tl:quantity>50</tl:quantity>
      </tl:aggregationEventExtensions>
    </AggregationEvent>
  </EventList>
</EPCISBody>
</EPCIS>

```

```

        <tl:packagingLevel>CA</tl:packagingLevel>
        <tl:resetContainerAggregation>true</tl:resetContainerAggregation>
        <tl:disaggregateFromParent>true</tl:disaggregateFromParent>
        <tl:plantLocationId>0333331013655</tl:plantLocationId>
        <tl:productionLineId>12436587</tl:productionLineId>
        <tl:lineManagerName>Fred Bobbit</tl:lineManagerName>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>
    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:088202.00200000034</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060007</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060008</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060009</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060010</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060011</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060012</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
    </bizLocation>
    <tl:aggregationEventExtensions>
        <tl:packedStatus>FULL</tl:packedStatus>
        <tl:quantity>50</tl:quantity>
        <tl:packagingLevel>CA</tl:packagingLevel>
        <tl:resetContainerAggregation>true</tl:resetContainerAggregation>
        <tl:disaggregateFromParent>true</tl:disaggregateFromParent>
        <tl:plantLocationId>0333331013655</tl:plantLocationId>
        <tl:productionLineId>12436587</tl:productionLineId>
        <tl:lineManagerName>Fred Bobbit</tl:lineManagerName>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>
    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>

```

```

<parentID>urn:epc:id:sscc:088202.00200000035</parentID>
<childEPCs>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060107</epc>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060108</epc>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060109</epc>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060110</epc>
</childEPCs>
<action>DELETE</action>
<bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
<disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
<bizLocation>
  <id>urn:epc:id:sgln:7777776.67345.0</id>
</bizLocation>
</AggregationEvent>
<AggregationEvent>
  <eventTime>2019-10-18T22:08:02Z</eventTime>
  <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
  <parentID>urn:epc:id:sscc:088202.00200000035</parentID>
  <childEPCs>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060013</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060014</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060015</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060016</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060017</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060018</epc>
  </childEPCs>
  <action>ADD</action>
  <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
  <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
  <bizLocation>
    <id>urn:epc:id:sgln:7777776.67345.0</id>
  </bizLocation>
  <tl:aggregationEventExtensions>
    <tl:packedStatus>FULL</tl:packedStatus>
    <tl:quantity>50</tl:quantity>
    <tl:packagingLevel>CA</tl:packagingLevel>
    <tl:resetContainerAggregation>true</tl:resetContainerAggregation>
    <tl:disaggregateFromParent>true</tl:disaggregateFromParent>
    <tl:plantLocationId>0333331013655</tl:plantLocationId>
    <tl:productionLineId>12436587</tl:productionLineId>
  </tl:aggregationEventExtensions>

```

```

        <tl:lineManagerName>Fred Bobbit</tl:lineManagerName>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>
    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:088202.00200001035</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060207</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060208</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060209</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060210</epc>
    </childEPCs>
    <action>DELETE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
    </bizLocation>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>
    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:088202.00200002035</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060307</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060308</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060309</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060310</epc>
    </childEPCs>
    <action>DELETE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
    </bizLocation>
</AggregationEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element      | Error Message                                                                     | Description                                                                                                     |
|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Class 1           |                                                                                   |                                                                                                                 |
| AggregationEvent  | At least one aggregation event is required !!!                                    | The error occurs if no <b>AggregationEvent</b> is present.                                                      |
| parentID          | Invalid EPC format !!!                                                            | The error occurs if the source is invalid.                                                                      |
| epc               | Invalid EPC format !!!                                                            | The error occurs if the source is invalid or is empty or null.                                                  |
| action            | Action ADD is required for aggregation !!!                                        | The error occurs if the source does not equal "ADD" for an aggregation event.                                   |
|                   | Action DELETE is required for disaggregation !!!                                  | The error occurs if the source does not equal "DELETE" for a disaggregation event.                              |
| bizStep           | bizStep urn:epcglobal:cbv:bizstep:packing is required for aggregation !!!         | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing" for an aggregation event.     |
|                   | bizStep urn:epcglobal:cbv:bizstep:unpacking is required for disaggregation !!!    | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:unpacking" for a disaggregation event. |
| disposition       | Disposition urn:epcglobal:cbv:disp:in_progress is required for aggregation !!!    | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress" for an aggregation event.    |
|                   | Disposition urn:epcglobal:cbv:disp:in_progress is required for disaggregation !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress" for a disaggregation event.  |
| bizLocation   id  | Business location is required !!!                                                 | The error occurs if the source is empty or null.                                                                |
|                   | Valid business location identifier type is required !!!                           | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.             |
| tl:packedStatus   | Valid packed status is required !!!                                               | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| tl:packagingLevel | Valid packaging level code is required !!!                                        | The error occurs if the source is invalid.                                                                      |
| tl:fieldName      | Field name is required if extension field group is present !!!                    | The error occurs if <b>tl:extensionField</b> is populated, but the source is empty or null.                     |
| tl:fieldValue     | Field value is required if extension field group present !!!                      | The error occurs if <b>tl:extensionField</b> is populated, but the source is empty or null.                     |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                    | Description                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 2</b>                                                                                                                                                    |                                                                                                                                                                                                  |                                                                                                                                                |
| AggregationEvent (aggregation event)   <b>eventTime</b>                                                                                                           | Event timestamp is earlier than the last event for serial number <Serial Number>.                                                                                                                | The error occurs if the source is before the commission event time for AggregationEvent (aggregation event)   <b>parentID</b> .                |
| AggregationEvent (disaggregation event)   <b>eventTime</b>                                                                                                        | Event timestamp is earlier than the aggregation date for serial number <Serial>.                                                                                                                 | The error occurs if the source is before the aggregation event time for AggregationEvent (disaggregation event)   <b>parentID</b> .            |
| AggregationEvent (aggregation event)   <b>parentID</b>                                                                                                            | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                                    |
|                                                                                                                                                                   | Parent Serial Number <ParentSerial> was not commissioned at this location.                                                                                                                       | The error occurs if the source was not commissioned at this subscriber location.                                                               |
| AggregationEvent (disaggregation event)   <b>parentID</b>                                                                                                         | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                                    |
|                                                                                                                                                                   | Serial number <Serial Number> not commissioned.                                                                                                                                                  | The error occurs if the source was not commissioned at this subscriber location.                                                               |
|                                                                                                                                                                   | Cannot perform operation on serial number [Serial Number] with item state [Serial Number Status]. This operation can only be performed when the serial number is Available or Blocked or Picked. | The error occurs if the source is not in an available, blocked, or picked status.                                                              |
|                                                                                                                                                                   | Serial number <Serial Number> does not have any items aggregated to it.                                                                                                                          | The error occurs if the source has no child serial numbers.                                                                                    |
| Aggregation Event (aggregation event)   childEPCs   <b>epc</b>                                                                                                    | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                                    |
|                                                                                                                                                                   | Serial Number <Serial> cannot be aggregated because it was not commissioned for this location.                                                                                                   | The error occurs if the source was not commissioned at this subscriber location.                                                               |
|                                                                                                                                                                   | Cannot aggregate Serial number <Serial> with UOM <PackagingLevelUOM> into Serial Number <ParentSerial> with UOM <PackagingLevelUOM>.                                                             | The error occurs if the source packaging level is larger than the packaging level for AggregationEvent (aggregation event)   <b>parentID</b> . |
| Aggregation Event (disaggregation event)   childEPCs   <b>epc</b>                                                                                                 | Serial Number <Serial> cannot be disaggregated because it was not previously aggregated to <ParentSerial>.                                                                                       | The error occurs if the source is not aggregated to AggregationEvent (disaggregation event)   <b>parentID</b> .                                |
| AggregationEvent (disaggregation event)   bizLocation   <b>id</b>                                                                                                 | Authorization Response from server: Credentials are required to access this resource.                                                                                                            | The error occurs if the source cannot be found.                                                                                                |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                  |                                                                                                                                                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                  |                                                                                                                                                |

# Aggregation Update (SOAP)

## Aggregation Update Request

### Guidelines

The Aggregation Update message allows Pharmaceutical Manufacturer Owners to report the aggregation and disaggregation of product simultaneously to account for warehouse packing activities. Each message can contain multiple aggregations or disaggregations.

ⓘ When sending multiple aggregation events (i.e. aggregations, disaggregations, or a combination thereof) at the same time, use this message instead of individual Aggregation or Disaggregation messages.

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ The MDLP Bulk API currently has a limit of 20 events per message.

The following data is sent in the request to TraceLink:

| Elements         |                |                          | Occurs Length | Type | Notes                                                                                       |
|------------------|----------------|--------------------------|---------------|------|---------------------------------------------------------------------------------------------|
| soapenv:Envelope |                |                          | 1...1<br>-    | -    | <b>Required.</b> The SOAP envelope root element.                                            |
|                  | soapenv:Header |                          | 1...1<br>-    | -    | <b>Required.</b> Not used. The SOAP message header.                                         |
|                  | soapenv:Body   |                          | 1...1<br>-    | -    | <b>Required.</b> The SOAP message body.                                                     |
|                  |                | urn:AggregateUpdate      | 1...1<br>-    | -    | <b>Required.</b> Aggregation Update message.                                                |
|                  |                | AggregationUpdateRequest | 0...1<br>-    | -    | <b>Required.</b> Aggregate request to associate child serial numbers to a parent container. |

| Elements |  |  |  |               |            | Occurs Length | Type   | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|--|--|--|---------------|------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  | Aggregations  |            | 0...*<br>-    | -      | Aggregation group element.                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          |  |  |  | Aggregation   |            | 0...*<br>-    | -      | <b>Required.</b> Aggregation event. See the Aggregation   <b>Strict</b> element for important configuration information.                                                                                                                                                                                                                                                                                                                                  |
|          |  |  |  | Container     |            | 1...1<br>-    | -      | <b>Required.</b> Parent container serial information. If the Aggregation   <b>Container</b> is specified, all items must currently be a child of the specified container.                                                                                                                                                                                                                                                                                 |
|          |  |  |  |               | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Parent container's serial number. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                           |
|          |  |  |  |               | @namespace | 0...1<br>0/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  | Items         |            | 1...1<br>-    | -      | <b>Required.</b> Child serial information.                                                                                                                                                                                                                                                                                                                                                                                                                |
|          |  |  |  |               | Item       | 1...*<br>-    | -      | <b>Required.</b> List of one or more child serial numbers to aggregate to parent container's serial number.                                                                                                                                                                                                                                                                                                                                               |
|          |  |  |  |               | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Child serial number in one of the following formats: <ul style="list-style-type: none"> <li>AI(01)+AI(21) formatted numbers are: 01 + [GTIN14] + 21 + [serial number]<br/>Ex: <b>015088202503022521100000090109</b></li> <li>AI(00) formatted numbers are: 00 + [SSCC18 code]<br/>Ex: <b>00008820200000047506</b></li> <li>CN-EDMC formatted serial numbers are: 20 digit China EDMC code<br/>Ex: <b>81530070000022519351</b></li> </ul> |
|          |  |  |  |               | @namespace | 0...1<br>1/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  | EventDateTime |            | 0...1<br>-    | Date   | Timestamp of the date and time of the aggregation event with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. If omitted, the system will record the current date and time. <sup>2</sup>                                                                                                                                                                                                                                                     |

<sup>1</sup>00008820200000047506<sup>2</sup>2021-12-21T11:16:52.575Z



| Elements |  |  |  |  |                      | Occurs Length | Type    | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|--|--|--|--|----------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  |  | Location             | 0...1<br>1/*  | String  | Site-level SGLN of the location where the event occurred. The SGLN format is the numeric component only, with urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events). <sup>1</sup>                                                                                                                                                                                                              |
|          |  |  |  |  | Strict               | 1...1<br>-    | Boolean | <b>Required.</b> Flag that determines if the system performs an implicit disaggregation and then aggregates the items.<br>Valid values: <ul style="list-style-type: none"> <li>If <b>true</b>, the aggregated item(s) must not already have a parent. If they do, an error will be returned.</li> <li>If <b>false</b>, the items are re-associated to the new parent and the items' previous aggregations are adjusted.</li> </ul>                             |
|          |  |  |  |  | ResetAggregation     | 0...1<br>-    | Boolean | Flag indicating to disaggregate all existing items in a container and aggregate the new set of items into that container.<br>Valid values: <ul style="list-style-type: none"> <li>If <b>true</b>, TraceLink disaggregates all existing items in the specified container and aggregates the new set of items into that container.</li> <li>If <b>false</b> (default), TraceLink does not disaggregate all existing items in the specified container.</li> </ul> |
|          |  |  |  |  | ParentCompanyPrefix  | 0...1<br>-    | String  | <b>Conditionally required</b> if the container serial number is unknown to TraceLink and must be commissioned. The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                 |
|          |  |  |  |  | ParentFilterValue    | 0...1<br>-    | String  | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                      |
|          |  |  |  |  | ParentFormat         | 0...1<br>-    | String  | <b>Conditionally required</b> if the container serial number is unknown to TraceLink and must be commissioned. The format of the parent serial numbers.<br>Valid values: <ul style="list-style-type: none"> <li>AI(01)+AI(21)</li> <li>AI(00)</li> <li>CN-EDMC</li> </ul>                                                                                                                                                                                      |
|          |  |  |  |  | ParentPackagingLevel | 0...1         | String  | The packaging level of the commissioned item using the supported enumeration values. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>8888882.02867.0<sup>2</sup>PL

| Elements |  |  |  |                 |                |            | Occurs Length | Type   | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|--|--|--|-----------------|----------------|------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  |                 |                |            |               |        | See the <a href="#">PackLevel</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                      |
|          |  |  |  | Disaggregations |                |            | 0...*<br>-    | -      | Disaggregation group header.                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          |  |  |  |                 | Disaggregation |            | 1...*<br>-    | -      | <b>Required.</b> Disaggregation event.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |  |  |  |                 | Container      |            | 0...*<br>-    | -      | <b>Conditionally required</b> if Disaggregation   <b>Strict</b> is set to <b>true</b> . Parent container serial number. If Disaggregation   <b>Container</b> is specified, all items must currently be a child of the specified container. If omitted, Disaggregation   <b>Strict</b> must be set to <b>false</b> .                                                                                                                                       |
|          |  |  |  |                 |                | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Parent serial number. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                       |
|          |  |  |  |                 |                | @namespace | 0...1<br>1/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  |                 | Items          |            | 1...1<br>-    | -      | <b>Required.</b> Child serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |  |  |  |                 |                | Item       | 1...*<br>-    | -      | <b>Required.</b> List of one or more child serial numbers to disaggregate from the parent container serial number.                                                                                                                                                                                                                                                                                                                                        |
|          |  |  |  |                 |                | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Child serial number in one of the following formats: <ul style="list-style-type: none"> <li>AI(01)+AI(21) formatted numbers are: 01 + [GTIN14] + 21 + [serial number]<br/>Ex: <b>015088202503022521100000090109</b></li> <li>AI(00) formatted numbers are: 00 + [SSCC18 code]<br/>Ex: <b>00008820200000047506</b></li> <li>CN-EDMC formatted serial numbers are: 20 digit China EDMC code<br/>Ex: <b>81530070000022519351</b></li> </ul> |
|          |  |  |  |                 |                | @namespace | 0...1<br>1/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  |                 | EventDateTime  |            | 0...1<br>-    | Date   | <b>Required.</b> Timestamp of the date and time of the disaggregation event with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. If omitted, the system will record the current date and time. <sup>2</sup>                                                                                                                                                                                                                                 |

<sup>1</sup>00008820200000047506<sup>2</sup>2021-12-21T11:16:52.575Z

| Elements |  |  |  |  |          | Occurs Length | Type    | Notes                                                                                                                                                                                                                                                                                                                                                          |
|----------|--|--|--|--|----------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  |  | Location | 0...1<br>1/*  | String  | <b>Required.</b> Site-level SGLN of the location where the event occurred. SGLN format is the numeric component only, with urn prefix stripped (e.g. <code>8888882.02867.0</code> instead of <code>urn:epc:id:sgln:8888882.02867.0</code> typically found in EPCIS events). <sup>1</sup>                                                                       |
|          |  |  |  |  | Strict   | 1...1<br>-    | Boolean | Flag that determines whether Disaggregation   <b>Container</b> must be provided. <ul style="list-style-type: none"> <li>If <code>true</code>, the parent container must be specified.</li> <li>If <code>false</code>, the parent container is not specified and the child serial numbers are implicitly disaggregated from their parent containers.</li> </ul> |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:AggregateUpdate>
      <AggregationUpdateRequest>
        <completed>false</completed>
        <Aggregations>
          <Aggregation>
            <Container sn="016862905203607821100000000030"/>
            <Items>
              <Item sn="018862905202566321100000000005"/>
            </Items>
            <EventDateTime>2020-12-31T11:16:52.575Z</EventDateTime>
            <Location>86290520.4996.0</Location>
            <Strict>true</Strict>
            <ResetAggregation>false</ResetAggregation>
            <IsCommissionSSCC>false</IsCommissionSSCC>
          </Aggregation>
        </Aggregations>
        <Disaggregations>
          <Disaggregation>
            <Container sn="016862905203607821100000000030"/>
            <Items>
```

<sup>1</sup>8888882.02867.0

```

        <Item sn="018862905202566321100000000005"/>
      </Items>
      <EventDateTime>2020-12-31T11:18:53.193Z</EventDateTime>
      <Location>86290520.4996.0</Location>
      <Strict>true</Strict>
    </Disaggregation>
  </Disaggregations>
</AggregationUpdateRequest>
</urn:AggregateUpdate>
</soapenv:Body>
</soapenv:Envelope>

```

Errors

| Exception Code | Exception Message                                                                                                                                                                                |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VALIDATION     | Serial number <Serial Number> does not exist.                                                                                                                                                    |
|                | Cannot aggregate Serial number <Serial> with UOM <PackagingLevelUOM> into Serial Number <ParentSerial> with UOM <PackagingLevelUOM>.                                                             |
|                | Serial number <Serial Number> is already aggregated to <Actual Parent Serial Number>.                                                                                                            |
|                | Cannot perform operation on serial number [Serial Number] with item state [Serial Number Status]. This operation can only be performed when the serial number is Available or Blocked or Picked. |
|                | Serial Number <Serial> cannot be disaggregated because it was not previously aggregated to <ParentSerial>.                                                                                       |
|                | Event timestamp is earlier than the aggregation date for serial number <Serial>.                                                                                                                 |

Aggregation Update Response

Guidelines

⚠ The MDLP Bulk API currently has a limit of 20 events per message.

The following data is included in the message response:

| Data Element          |  |  |  |  | Occurs Length | Type   | Description                                                                                                                                                              |
|-----------------------|--|--|--|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S:Envelope            |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The SOAP Envelope root element.                                                                                                                         |
| S:Body                |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The SOAP Message Body.                                                                                                                                  |
| ns2:AggregateResponse |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The Aggregation Update response message.                                                                                                                |
| TLResponse            |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The TraceLink response.                                                                                                                                 |
| Success               |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> Indicates if the Aggregation Update request successfully processed. <sup>1</sup>                                                                        |
| ExceptionReturn       |  |  |  |  | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>Success</b> = <code>false</code> . Populated with error information only if <b>Success</b> = <code>false</code> , otherwise omitted. |
| CallException         |  |  |  |  | 1...*<br>-    | -      | <b>Required.</b> Contains error information including the exception code and error message, if available.                                                                |
| ExceptionCode         |  |  |  |  | 1...1<br>0/*  | String | <b>Required.</b> Error code.                                                                                                                                             |
| ExceptionMessage      |  |  |  |  | 0...1<br>0/*  | String | <b>Conditionally required</b> if an error occurred. Message that further describes error condition, if available.                                                        |

## Example

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:AggregateUpdateResponse xmlns:ns2="http://tracelink.com/som" xmlns:ns3="urn:tracelink:soap">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns3:AggregateUpdateResponse>
  </S:Body>
</S:Envelope>
```

<sup>1</sup>true

# Disaggregation APIs

## Why do I use these messages?

Use the following messages to capture the disaggregation of serial numbers from a parent container.

## Which report do these messages generate?

These messages generate [913 - Unit Extract](#) report in the Russia Compliance application if the items being disaggregated have a target market of Russia.

## ESM Disaggregate (EPCIS v1.2)

### Guidelines

Use this message to notify upstream partners about disaggregation.

**Message Type:** SOM\_ESM\_DISAGGREGATE

**Info Exchange Display Name:** ESM Disaggregate

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type | Description                                  |
|---------------------|---------------|------|----------------------------------------------|
| epcis:EPCISDocument | 1...1         | -    | <b>Required.</b> EPCIS message root element. |

| Data Element |                |                                     |                    | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|----------------|-------------------------------------|--------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | @schemaVersion |                                     |                    | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              | @creationDate  |                                     |                    | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              | EPCISHeader    |                                     |                    | 1...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |                | sbdh:StandardBusinessDocumentHeader |                    | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |                |                                     | sbdh:HeaderVersion | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <a href="#">1.0</a> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |                |                                     | sbdh:Sender        | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                               |
|              |                |                                     | sbdh:Identifier    | 1...1<br>1/*  | String   | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>4</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example: <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <div>  GLNs do not have an urn/http prefix. </div> |
|              |                |                                     | @Authority         | 1...1<br>1/*  | String   | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                   |
|              |                |                                     | sbdh:Receiver      | 1...*<br>-    | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>1.2<sup>2</sup>2016-12-18T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |           |                             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|-----------|-----------------------------|--------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |           |                             | sbdh:Identifier          | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLNs do not have an urn/http prefix.</p> |
|              |  |           |                             | @Authority               | 1...1<br>1/*  | String   | <p><b>Required.</b> The receiver identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>2</sup></p>                                                                                                                                                                                                                                                                                     |
|              |  |           | sbdh:DocumentIdentification |                          | 1...1<br>-    | -        | <p><b>Required.</b> Contains the identification group for the message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |           |                             | sbdh:Standard            | 1...1<br>0/*  | String   | <p><b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b>.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |           |                             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <p><b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b>.<sup>4</sup></p>                                                                                                                                                                                                                                                         |
|              |  |           |                             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <p><b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others.<sup>5</sup></p>                                                                                                                                                                                                                                                                              |
|              |  |           |                             | sbdh:Type                | 1...1<br>0/*  | String   | <p><b>Required.</b> Identifies the document type. The <b>Type</b> value is set to <b>Events</b> for a disaggregation event.<sup>6</sup></p>                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |           |                             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <p><b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b>.</p>                                                                                                                                                                                                                                     |
|              |  | EPCISBody |                             |                          | 1...1<br>-    | -        | <p><b>Required.</b> Contains all of the EPCIS events for the disaggregation message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCglobal<sup>4</sup>1.0<sup>5</sup>201609201745200001<sup>6</sup>Events



| Data Element |  |           |                     | Occurs Length   | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|-----------|---------------------|-----------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | EventList |                     | 1...1<br>-      | -        | <b>Required.</b> The <b>EventList</b> must contain one or more <b>AggregationEvent</b> data elements for a disaggregation message.                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |           | AggregationEvent    | 0...*<br>-      | -        | <p>The <b>AggregationEvent</b> is used in the <b>EventList</b> and indicates a disaggregation event when all of the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = <b>DELETE</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:unpacking</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul>                                                                                                                                                          |
|              |  |           | eventTime           | 1...11/*<br>1/* | DateTime | <p><b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the Z to be appended if it is not included; however, the system assumes that the time is GMT and therefore appends the Z.<sup>1</sup></p> <p> <b>eventTime</b> can include 2 or 3 milliseconds.</p> |
|              |  |           | eventTimeZoneOffset | 1...1<br>1/*    | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for <b>eventTime</b> . A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time - whether it is standard time or daylight saving time, per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                    |
|              |  |           | parentID            | 0...1<br>0/*    | AnyURI   | Identifier of the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPC is of the case; for a case-to-pallet aggregation, the EPC is of the pallet). See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>3</sup>                                                                                                                                                                                                                                                            |
|              |  |           | childEPCs           | 1...1<br>-      | -        | <b>Required.</b> Contains a list of identifiers, including the child items, in the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPCs is of the items; for a case-to-pallet aggregation, the EPCs is of the cases).                                                                                                                                                                                                                                                                |
|              |  |           | epc                 | 1...*<br>1/*    | String   | <b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |           | action              | 1...1<br>0/*    | String   | <b>Required.</b> The action taken in the message, e.g. an action value is set to <b>ADD</b> for a commissioning event and to <b>DELETE</b> for a decommission event. The <b>action</b> value must equal <b>DELETE</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                             |
|              |  |           | bizStep             | 1...1           | String   | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value must equal                                                                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>2013-10-01T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:088202.5503022.100000000670<sup>4</sup>urn:epc:id:sgtin:088202.5503022.100000000670<sup>5</sup>DELETE

| Data Element |  |  |  |               | Occurs Length | Type   | Description                                                                                                                                                                                                                                          |
|--------------|--|--|--|---------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |               |               |        | . <sup>1</sup>                                                                                                                                                                                                                                       |
|              |  |  |  | disposition   | 1...1<br>0/*  | String | <b>Required.</b> Status of the transaction, which is grouped with the <b>bizStep</b> and <b>action</b> fields to define the message event. The <b>disposition</b> value must equal <a href="#">urn:epcglobal:cbv:disp:in_progress</a> . <sup>2</sup> |
|              |  |  |  | bizLocation   | 1...1<br>-    | -      | <b>Required.</b> The SGLN EPC of the location where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier.                                                                                                         |
|              |  |  |  | id            | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a finer-grain location identifier. <sup>3</sup>                                                                                        |
|              |  |  |  | tl:locationId | 0...1<br>0/*  | String | External Subscriber Location identifier. <sup>4</sup>                                                                                                                                                                                                |
|              |  |  |  | @type         | 0...1<br>0/*  | String | <b>Required.</b> Identifies the location types. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. <sup>5</sup>                                                                                                        |

## Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<epcis:EPCISDocument xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcglobal="urn:epcglobal:xsd:1" schemaVersion="1" creationDate="2014-02-28T19:12:53Z"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:epcglobal:epcis:xsd:1
../../../../workspace-git/maps_xml_schema/release-obstruction/xmlSchema/pt_serialization/transaction/TL_EPCIS_SOM_
EPCglobal-epcis-1_2.xsd">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
```

<sup>1</sup>urn:epcglobal:cbv:bizstep:unpacking

<sup>2</sup>urn:epcglobal:cbv:disp:in\_progress

<sup>3</sup>urn:epc:id:sgln:0614141.12345.1400

<sup>4</sup>urn:epc:id:sgln:0614141.12345.1400

<sup>5</sup>GLN

```

    <sbdh:Identifier Authority="GLN">8889991013658</sbdh:Identifier>
  </sbdh:Receiver>
  <sbdh:DocumentIdentification>
    <sbdh:Standard>EPCglobal</sbdh:Standard>
    <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
    <sbdh:InstanceIdentifier>2019-06-17</sbdh:InstanceIdentifier>
    <sbdh:Type>Events</sbdh:Type>
    <sbdh:CreationDateAndTime>2019-06-17T18:45:20.0Z</sbdh:CreationDateAndTime>
  </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <AggregationEvent>
      <eventTime>2019-06-17T18:45:20.0Z</eventTime>
      <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
      <parentID>urn:epc:id:sscc:088202.00200000034</parentID>
      <childEPCs>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024597</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024598</epc>
      </childEPCs>
      <action>DELETE</action>
      <bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
      <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
      <readPoint>
        <id>urn:epc:id:sgln:9997777.01994.0</id>
      </readPoint>
      <bizLocation>
        <id>urn:epc:id:sgln:8889991.01365.0</id>
      </bizLocation>
      <tl:locationId type="DUNS">710040977</tl:locationId>
    </AggregationEvent>
  </EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                                                                                                                                      | Error Message                                                                                     | Description                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Class 1</b>                                                                                                                                                    |                                                                                                   |                                                                                               |
| action                                                                                                                                                            | Action DELETE is required for disaggregation !!!                                                  | The error occurs if the source does not equal "DELETE".                                       |
| AggregationEvent                                                                                                                                                  | AggregationEvent is required for disaggregation !!!                                               | The error occurs if the source is empty or null.                                              |
| bizLocation   id                                                                                                                                                  | Event location in the aggregation event is required !!!                                           | The error occurs if the source is empty or null.                                              |
| bizStep                                                                                                                                                           | bizStep urn:epcglobal:cbv:bizstep:unpacking is required for disaggregation !!!                    | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:unpacking".          |
| disposition                                                                                                                                                       | Disposition urn:epcglobal:cbv:disp:in_progress is required for disaggregation !!!                 | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".           |
| epc                                                                                                                                                               | System will return error if source missing.                                                       | The error occurs if the source is empty or null.                                              |
|                                                                                                                                                                   | Invalid EPC format !!!                                                                            | The error occurs if the source cannot be translated.                                          |
|                                                                                                                                                                   | Invalid EPC format !!!                                                                            | The error occurs if the source is invalid.                                                    |
| parentID                                                                                                                                                          | System will return error if source missing.                                                       | The error occurs if the source is empty or null.                                              |
|                                                                                                                                                                   | Invalid EPC format !!!                                                                            | The error occurs if the source is invalid.                                                    |
|                                                                                                                                                                   | Invalid EPC format !!!                                                                            | The error occurs if the source cannot be translated.                                          |
| sbdh:Receiver   sbdh:Identifier   @Authority                                                                                                                      | Valid Receiver/Identifier Authority is required !!!                                               | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| sbdh:Sender   sbdh:Identifier   @Authority                                                                                                                        | Valid Sender/Identifier Authority is required !!!                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| tl:locationId   @type                                                                                                                                             | Required if source locationId is populated. System will throw error if [@type] attribute missing. | The error occurs if the source is empty or null.                                              |
|                                                                                                                                                                   | Valid location identifier type is required if location ID is populated !!!                        | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| <b>Class 2</b>                                                                                                                                                    |                                                                                                   |                                                                                               |
| -                                                                                                                                                                 | -                                                                                                 | -                                                                                             |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                   |                                                                                               |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                   |                                                                                               |

# Disaggregate (SOAP)

## Disaggregation Request

### Guidelines

❶ When sending multiple aggregation events (i.e. aggregations, disaggregations, or a combination thereof) at the same time, use the [Aggregation Update](#) message instead of individual Aggregation or Disaggregation messages.

❷ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

The following data is sent in the request to TraceLink:

| Data Element        |  |  |  |  | Occurs Length | Type | Description                                                                                                                                                                                           |
|---------------------|--|--|--|--|---------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| soapenv:Envelope    |  |  |  |  | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element.                                                                                                                                                          |
| soapenv:Header      |  |  |  |  | 1...1<br>-    | -    | Not used by TraceLink.                                                                                                                                                                                |
| soapenv:Body        |  |  |  |  | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Body.                                                                                                                                                                   |
| urn:Disaggregate    |  |  |  |  | 1...1<br>-    | -    | <b>Required.</b> Disaggregate message.                                                                                                                                                                |
| DisaggregateRequest |  |  |  |  | 0...1<br>-    | -    | <b>Required.</b> The disaggregate request message to disassociate child serial numbers from a parent container.                                                                                       |
| Container           |  |  |  |  | 0...1<br>-    | -    | The parent container's serial number. If <b>Container</b> is specified, all items must currently be a child of the specified container. If omitted, <b>Strict</b> must be set to <code>false</code> . |

| Data Element |  |  |  |               |            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|---------------|------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |               | @sn        | 1...1<br>1/*  | String  | <b>Required.</b> The parent serial number. See <a href="#">Serial Number Format Examples</a> . <sup>1</sup>                                                                                                                                                                                                                                 |
|              |  |  |  |               | @namespace | 0...1<br>1/*  | String  | Not currently supported by TraceLink. Leave this field blank.                                                                                                                                                                                                                                                                               |
|              |  |  |  | Items         |            | 1...1<br>-    | -       | <b>Required.</b> Child serial information.                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | Item          |            | 1...*<br>-    | -       | <b>Required.</b> A list of one or more child serial numbers to disaggregate from the parent container serial number.                                                                                                                                                                                                                        |
|              |  |  |  |               | @sn        | 1...1<br>1/*  | String  | <b>Required.</b> A child serial number. See <a href="#">Serial Number Format Examples</a> . <sup>2</sup>                                                                                                                                                                                                                                    |
|              |  |  |  |               | @namespace | 0...1<br>1/*  | String  | Not currently supported by TraceLink. Leave this field blank.                                                                                                                                                                                                                                                                               |
|              |  |  |  | EventDateTime |            | 0...1<br>-    | Date    | The date and time of the disaggregation event in XSD GMT date format. If omitted, the system will record the current date-time. <sup>3</sup>                                                                                                                                                                                                |
|              |  |  |  | LocationType  |            | 1...1<br>1/*  | String  | The type of location where the event occurred. See the <a href="#">LocationId</a> enumeration list for valid values.                                                                                                                                                                                                                        |
|              |  |  |  | Location      |            | 1...1<br>1/*  | String  | <p>The site-level location identifier where the event occurred.<sup>4</sup></p> <div> <p><b>i</b> In most cases, this value is an SGLN, the format for which must be the numeric component only, with the urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events).</p> </div> |
|              |  |  |  | Strict        |            | 1...1<br>-    | Boolean | <ul style="list-style-type: none"> <li>If <b>true</b>, the parent container must be specified.<sup>5</sup></li> <li>If <b>false</b>, the parent container is not specified and the child serial numbers are implicitly disaggregated from their parent containers.</li> </ul>                                                               |

<sup>1</sup>00008820200000047506<sup>2</sup>015088202503022521100000090109<sup>3</sup>2015-06-01T17:10:16Z<sup>4</sup>8888882.02867.0<sup>5</sup>true

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:Disaggregate>
      <DisaggregateRequest>
        <Container sn="00008820200000047506"/>
        <Items>
          <Item sn="015088202503022521100000090109"/>
          <Item sn="015088202503022521100000090110"/>
        </Items>
        <EventDateTime>2015-06-01T17:10:16Z</EventDateTime>
        <LocationType>SGLN</LocationType>
        <Location>8888882.02867.0</Location>
        <Strict>true</Strict>
      </DisaggregateRequest>
    </urn:Disaggregate>
  </soapenv:Body>
</soapenv:Envelope>
```

## Errors

| Exception Code           | Exception Message                                                                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BADITEMSTATE             | Cannot perform operation on serial number <serial number> with item state <item state>. This operation can only be performed when the serial number is <item state>. |
| EVENTTIMEAFTERNOW        | Event time stamp must not be in the future.                                                                                                                          |
| EVENTTIMEBEFORELASTEVENT | Event time stamp is earlier than the last event for serial number <serial number>.                                                                                   |
| INTERNALERROR            | Found more than one serial number for Internal error from server: <server information>.                                                                              |
| NOSOMSERVICE             | No Serialized Operations Manager service found.                                                                                                                      |
| NOTAGGREGATED            | Serial number <serial number> is not aggregated to any container.                                                                                                    |
| NOTAGGREGATEDTOPARENT    | Serial number <serial number> is not aggregated to <parent serial number>.                                                                                           |
| NOTCOMMISSIONED          | Serial number <serial number> is not commissioned.                                                                                                                   |

| Exception Code      | Exception Message                                                                                                                                                  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTVALIDLOCATION    | Location <location identifier> was not valid for serial number <serial number>.                                                                                    |
| SNNOTFOUND          | Serial number <serial number> does not exist.                                                                                                                      |
| SOMDUPLICATESNS     | The following serial numbers were listed more than once: <serial number>.                                                                                          |
| THROUGHPUT_EXCEEDED | Throughput has been exceeded. Please retry your message again. If this error continues, consider reducing the size of your operation or contact TraceLink support. |
| VALIDATION          | The parameter <Container> is missing or had an invalid value.                                                                                                      |

## Disaggregation Response

### Guidelines

The following data is included in the message response:

| Data Element |        |                          |            |                 | Occurs Length | Type | Description                                                                                                     |
|--------------|--------|--------------------------|------------|-----------------|---------------|------|-----------------------------------------------------------------------------------------------------------------|
| S:Envelope   |        |                          |            |                 | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element.                                                                    |
|              | S:Body |                          |            |                 | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Body.                                                                             |
|              |        | ns2:DisaggregateResponse |            |                 | 1...1<br>-    | -    | <b>Required.</b> Disaggregate response message.                                                                 |
|              |        |                          | TLResponse |                 | 0...1<br>-    | -    | <b>Required.</b> TraceLink response.                                                                            |
|              |        |                          |            | Success         | 0...1<br>-    | -    | <b>Required.</b> Indicates if the disaggregate request successfully processed. <sup>1</sup>                     |
|              |        |                          |            | ExceptionReturn | 0...1<br>-    | -    | <b>Conditionally required</b> if <b>Success</b> = <b>false</b> , otherwise omitted. Contains error information. |
|              |        |                          |            | CallException   | 1...*<br>-    | -    | <b>Required.</b> Contains error details such as exception code and error message, if available.                 |

<sup>1</sup>true



| Data Element |  |  |  |  |  |                  | Occurs Length | Type   | Description                                                                                                    |
|--------------|--|--|--|--|--|------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | ExceptionCode    | 0...1<br>0/*  | String | <b>Required.</b> Error code. <sup>1</sup>                                                                      |
|              |  |  |  |  |  | ExceptionMessage | 0...1<br>0/*  | String | <b>Conditionally required</b> if exception message exists. Message that further describes the error condition. |

## Example

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:DisaggregateResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns2:DisaggregateResponse>
  </S:Body>
</S:Envelope>
```

# Aggregation Update (XML)

## Guidelines

Use this message to capture both aggregation and disaggregation events simultaneously. If the items being disaggregated have a Russia target market, this message initiates the [911 - Unit Pack](#) and [914 - Unit Append](#) reports in addition to the [913 - Unit Extract](#) report.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_AGGREGATE\_UPDATE

**Info Exchange Display Name:** Aggregate Update

<sup>1</sup>SNOTFOUND

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

❗ The MDLP Bulk API currently has a limit of 20 events per message.

| Data Element                    |                       |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                |
|---------------------------------|-----------------------|------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| som:SOMAggregationUpdateMessage |                       |                        | 1...1<br>-    | -      | <b>Required.</b> The TL XML message root element.                                                                                                                                                                                          |
|                                 | som:ControlFileHeader |                        | 1...1<br>-    | -      | <b>Required.</b> The message document's header information.                                                                                                                                                                                |
|                                 |                       | cmn:FileSenderNumber   | 1...1<br>1/20 | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup>                                                                                                                                                                 |
|                                 |                       | cmn:FileReceiverNumber | 1...1<br>1/20 | String | <b>Required.</b> The company identifier of the file's recipient. <sup>2</sup>                                                                                                                                                              |
|                                 |                       | cmn:FileControlNumber  | 1...1<br>1/*  | String | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>3</sup>                                                                                                         |
|                                 |                       | cmn:FileDate           | 1...1<br>1/*  | Date   | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>4</sup>                                                                                                                       |
|                                 |                       | cmn:FileTime           | 1...1<br>1/*  | Time   | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>5</sup> |
|                                 | som:MessageBody       |                        | 1...1<br>-    | -      | <b>Required.</b> Aggregation Update message details.                                                                                                                                                                                       |
|                                 |                       | choice%1               | 1...*<br>-    | -      | <b>Required.</b> Looping choice element. At least one instance of either <b>cmn:Aggregation</b> or <b>cmn:Disaggregation</b> is required.                                                                                                  |

<sup>1</sup>8888882028655

<sup>2</sup>8888882028677

<sup>3</sup>20190920-LD3

<sup>4</sup>2019-09-20

<sup>5</sup>04:30:32Z

| Data Element |  |                 |                         | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                            |
|--------------|--|-----------------|-------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:Aggregation |                         | 0...1<br>-    | -        | <b>Conditionally required</b> if cmn:Disaggregation is not present. Aggregation group header.                                                                                                                                                                                                                                          |
|              |  |                 | cmn:EventDateTime       | 1...1<br>0/*  | DateTime | <b>Required.</b> Timestamp of the date and time of the product release with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. <sup>1</sup>                                                                                                                                                                                 |
|              |  |                 | cmn:EventTimeZoneOffset | 1...1<br>6/6  | String   | <b>Required.</b> The time zone offset in effect where the packaging occurs. Default value is "+00:00". <sup>2</sup>                                                                                                                                                                                                                    |
|              |  |                 | cmn:EventLocation       | 1...1<br>0/34 | String   | <b>Required.</b> Business or location identifier for the entity that is importing the products. <sup>3</sup>                                                                                                                                                                                                                           |
|              |  |                 | cmn:EventLocationType   | 1...1<br>1/*  | String   | <b>Required.</b> Business or location type for the entity that is importing the product. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                              |
|              |  |                 | cmn:PlantLocationId     | 0...1<br>0/34 | String   | Plant location identifier if present. <sup>5</sup>                                                                                                                                                                                                                                                                                     |
|              |  |                 | cmn:ProductionLineId    | 0...1<br>0/*  | String   | The name of the production line where the packaging occurs. <sup>6</sup>                                                                                                                                                                                                                                                               |
|              |  |                 | cmn:LineManagerName     | 0...1<br>0/*  | String   | The name of the line or production manager who is on shift when the batch is produced. <sup>7</sup>                                                                                                                                                                                                                                    |
|              |  |                 | cmn:ParentSerial        | 1...1<br>1/*  | String   | <b>Required.</b> Parent serial number for aggregation expressed in GS1 Application Identifier format, without parentheses, for the AI keys. AI(01)(21) formatted serial numbers for GTINs or AI(00) formatted serial number for SSCCs, without parentheses. Express non-GS1 serial numbers (e.g. China) in native format. <sup>8</sup> |
|              |  |                 | @companyPrefix          | 0...1<br>0/*  | String   | <b>Conditionally required</b> if commissioning a new SSCC. The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                             |
|              |  |                 | @filterValue            | 0...1         | String   | <b>Conditionally required</b> if commissioning a new SSCC. The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                   |

<sup>1</sup>2019-09-20T04:30:32.12Z<sup>2</sup>+00:00<sup>3</sup>0333331013655<sup>4</sup>GLN<sup>5</sup>0333331013655<sup>6</sup>12436587<sup>7</sup>Fred Bobbit<sup>8</sup>015088202501033321100000060001

| Data Element |  |  |                               |                | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|-------------------------------|----------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                               | @format        | 0...1<br>0/*  | String  | <b>Conditionally required</b> if commissioning a new SSCC. Identifies the serial number format.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                            |
|              |  |  | cmn:PackedStatus              |                | 0...1<br>0/*  | String  | The packed status of the item or container. <sup>1</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                             |
|              |  |  | cmn:PackagingLevel            |                | 0...1<br>0/*  | String  | The packaging level of the item. <sup>2</sup><br>See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                                                                                      |
|              |  |  | cmn:Quantity                  |                | 0...1<br>-    | Integer | Quantity of serial numbers reported. <sup>3</sup>                                                                                                                                                                                                                                                               |
|              |  |  | cmn:NumberList                |                | 1...1<br>-    | -       | <b>Required.</b> List of serial numbers for the items in the parent container.                                                                                                                                                                                                                                  |
|              |  |  |                               | cmn:Serial     | 1...*<br>1/*  | String  | <b>Required.</b> Serial number expressed in GS1 Application Identifier format, without parentheses, for the AI keys. AI(01)(21) formatted serial numbers for GTINs or AI(00) formatted serial number for SSCCs, without parentheses. Express non-GS1 serial numbers (e.g. China) in native format. <sup>4</sup> |
|              |  |  |                               | @companyPrefix | 0...1<br>0/*  | String  | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                 |
|              |  |  |                               | @filterValue   | 0...1<br>0/*  | String  | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                       |
|              |  |  |                               | @format        | 0...1<br>0/*  | String  | Identifies the serial number format.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                       |
|              |  |  |                               | @packedStatus  | 0...1<br>0/*  | String  | The packed status of the item or container. <sup>5</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                             |
|              |  |  | cmn:ResetContainerAggregation |                | 0...1         | Boolean | Flag that tells TraceLink what to do if serial numbers already exist in the parent container.                                                                                                                                                                                                                   |

<sup>1</sup>FULL<sup>2</sup>CA<sup>3</sup>10<sup>4</sup>015088202501033321100000060002<sup>5</sup>FULL

| Data Element |  |  |                            | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|----------------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                            |               |          | Valid values: <sup>1</sup> <ul style="list-style-type: none"> <li><b>true</b> – The existing child items that are not present in the new <b>cmn:NumberList</b> are disaggregated from their parent container.</li> <li><b>false</b> (default) – The existing child items that are not present in the new <b>cmn:NumberList</b> are retained in the parent container.</li> </ul>                                                                                                                                         |
|              |  |  | cmn:DisaggregateFromParent | 1..1<br>-     | Boolean  | <b>Required.</b> Flag that tells TraceLink whether or not to automatically disaggregate child serial numbers from their existing parent container.<br>Valid values: <sup>2</sup> <ul style="list-style-type: none"> <li><b>true</b> – The existing aggregation of the child items is adjusted and the items are aggregated to the new parent container.</li> <li><b>false</b> – The existing aggregation of the child items is not adjusted and the items are not disaggregated from their parent container.</li> </ul> |
|              |  |  | cmn:ExtensionField         | 0...*<br>-    | -        | Extension to pass one or more name value pairs containing additional data attributes that are not already supported in this message.<br><br><div>  The <b>tl:extensionField</b> element group is not stored by TraceLink, and is used only when a trade partner requires additional information (e.g. when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer). </div>                            |
|              |  |  | cmn:FieldName              | 1..1<br>1/*   | String   | <b>Required.</b> Populate with the field name provided by the trade partner that receives the outbound message.<br><br><div>  <b>cmn:FieldName</b> is case sensitive and must match the field name provided by the trade partner exactly. </div>                                                                                                                                                                                      |
|              |  |  | cmn:FieldValue             | 1..1<br>1/*   | String   | <b>Required.</b> The field value that corresponds to <b>cmn:FieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | cmn:Disaggregation         | 0..1<br>-     | -        | Disaggregation group header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | cmn:EventDateTime          | 1..1<br>0/*   | DateTime | <b>Required.</b> Timestamp of the date and time of the product release with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>true<sup>2</sup>true<sup>3</sup>2019-09-20T06:30:32.12Z

| Data Element |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|-------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:EventTimeZoneOffset | 1...1<br>6/6  | String | <b>Required.</b> The time zone offset in effect where the packaging occurs. Default value is "+00:00". <sup>1</sup>                                                                                                                                                                                                      |
|              |  |  | cmn:EventLocation       | 1...1<br>0/34 | String | <b>Required.</b> Business or location identifier for the entity that is importing the products. <sup>2</sup>                                                                                                                                                                                                             |
|              |  |  | cmn:EventLocationType   | 1...1<br>1/*  | String | <b>Required.</b> Business or location type for the entity that is importing the products. <sup>3</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                               |
|              |  |  | cmn:ParentSerial        | 0...1<br>0/*  | String | Parent serial number for aggregation expressed in GS1 Application Identifier format, without parentheses, for the AI keys. AI (01)AI(21) formatted serial numbers for GTINs or AI(00) formatted serial number for SSCCs, without parentheses. Express non-GS1 serial numbers (e.g. China) in native format. <sup>4</sup> |
|              |  |  | @companyPrefix          | 0...1<br>0/*  | String | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                          |
|              |  |  | @filterValue            | 0...1<br>0/*  | String | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                |
|              |  |  | @format                 | 0...1<br>0/*  | String | Identifies the serial number format.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                |
|              |  |  | cmn:NumberList          | 1...1<br>-    | -      | <b>Required.</b> List of serial numbers for the items in the parent container.                                                                                                                                                                                                                                           |
|              |  |  | cmn:Serial              | 1...*<br>1/*  | String | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI(01)(21) formatted serial number for GTINs or AI(00) formatted serial number for SSCCs. Non-GS1 serial numbers (e.g. China) are expressed in native format. <sup>5</sup>                        |
|              |  |  | @companyPrefix          | 0...1<br>0/*  | String | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                          |
|              |  |  | @filterValue            | 0...1<br>0/*  | String | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                |

<sup>1</sup>+00:00<sup>2</sup>0333331013655<sup>3</sup>GLN<sup>4</sup>015088202501033321100000060030<sup>5</sup>015088202501033321100000060031

| Data Element |  |  |                    |                |               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--------------------|----------------|---------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                    |                | @format       | 0...1<br>0/*  | String | Identifies the serial number format.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                    |                | @packedStatus | 0...1<br>0/*  | String | The packed status of the item or container. <sup>1</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | cmn:ExtensionField |                |               | 0...*<br>-    | -      | Extension to pass one or more name value pairs containing additional data attributes that are not already supported in this message.<br><br><div>  The <b>tl:extensionField</b> element group is not stored by TraceLink, and is used only when a trade partner requires additional information (e.g. when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer). </div> |
|              |  |  |                    | cmn:FieldName  |               | 1...1<br>1/*  | String | <b>Required.</b> Populate with the field name provided by the trade partner that receives the outbound message.<br><br><div>  <b>cmn:FieldName</b> is case sensitive and must match the field name provided by the trade partner exactly. </div>                                                                                                                                                           |
|              |  |  |                    | cmn:FieldValue |               | 1...1<br>1/*  | String | <b>Required.</b> The field value that corresponds to <b>cmn:FieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMAggregationUpdateMessage xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028644</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>20130821065245</cmn:FileControlNumber>
    <cmn:FileDate>2019-09-20</cmn:FileDate>
    <cmn:FileTime>06:52:45.02Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <som:Aggregation>
      <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
      <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
    </som:Aggregation>
  </som:MessageBody>
</som:SOMAggregationUpdateMessage>
```

<sup>1</sup>FULL

```

<cmn:EventLocation>0333331013655</cmn:EventLocation>
<cmn:EventLocationType>GLN</cmn:EventLocationType>
<cmn:PlantLocationId>0333331013655</cmn:PlantLocationId>
<cmn:ProductionLineId>12436587</cmn:ProductionLineId>
<cmn:LineManagerName>Fred Bobbit</cmn:LineManagerName>
<cmn:ParentSerial>015088202501033321100000060001</cmn:ParentSerial>
<cmn:PackedStatus>FULL</cmn:PackedStatus>
<cmn:PackagingLevel>CA</cmn:PackagingLevel>
<cmn:Quantity>20</cmn:Quantity>
<cmn:NumberList>
  <cmn:Serial>015088202501033321100000060002</cmn:Serial>
  <cmn:Serial>015088202501033321100000060003</cmn:Serial>
  <cmn:Serial>015088202501033321100000060004</cmn:Serial>
  <cmn:Serial>015088202501033321100000060005</cmn:Serial>
  <cmn:Serial>015088202501033321100000060006</cmn:Serial>
  <cmn:Serial>015088202501033321100000060007</cmn:Serial>
  <cmn:Serial>015088202501033321100000060008</cmn:Serial>
  <cmn:Serial>015088202501033321100000060009</cmn:Serial>
</cmn:NumberList>
<cmn:ResetContainerAggregation>true</cmn:ResetContainerAggregation>
<cmn:DisaggregateFromParent>true</cmn:DisaggregateFromParent>
</som:Aggregation>
<som:Aggregation>
  <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
  <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
  <cmn:EventLocation>0333331013655</cmn:EventLocation>
  <cmn:EventLocationType>GLN</cmn:EventLocationType>
  <cmn:PlantLocationId>0333331013655</cmn:PlantLocationId>
  <cmn:ProductionLineId>12436587</cmn:ProductionLineId>
  <cmn:LineManagerName>Fred Bobbit</cmn:LineManagerName>
  <cmn:ParentSerial>015088202501033321100000060010</cmn:ParentSerial>
  <cmn:PackedStatus>FULL</cmn:PackedStatus>
  <cmn:PackagingLevel>CA</cmn:PackagingLevel>
  <cmn:Quantity>20</cmn:Quantity>
  <cmn:NumberList>
    <cmn:Serial>015088202501033321100000060011</cmn:Serial>
    <cmn:Serial>015088202501033321100000060012</cmn:Serial>
    <cmn:Serial>015088202501033321100000060013</cmn:Serial>
    <cmn:Serial>015088202501033321100000060014</cmn:Serial>
    <cmn:Serial>015088202501033321100000060015</cmn:Serial>
  </cmn:NumberList>
</som:Aggregation>

```



```

        <cmn:Serial>015088202501033321100000060016</cmn:Serial>
        <cmn:Serial>015088202501033321100000060017</cmn:Serial>
        <cmn:Serial>015088202501033321100000060018</cmn:Serial>
    </cmn:NumberList>
    <cmn:ResetContainerAggregation>true</cmn:ResetContainerAggregation>
    <cmn:DisaggregateFromParent>true</cmn:DisaggregateFromParent>
</som:Aggregation>
<som:Aggregation>
    <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <cmn:PlantLocationId>0333331013655</cmn:PlantLocationId>
    <cmn:ProductionLineId>12436587</cmn:ProductionLineId>
    <cmn:LineManagerName>Fred Bobbit</cmn:LineManagerName>
    <cmn:ParentSerial>015088202501033321100000060051</cmn:ParentSerial>
    <cmn:PackedStatus>FULL</cmn:PackedStatus>
    <cmn:PackagingLevel>CA</cmn:PackagingLevel>
    <cmn:Quantity>20</cmn:Quantity>
    <cmn:NumberList>
        <cmn:Serial>015088202501033321100000060052</cmn:Serial>
        <cmn:Serial>015088202501033321100000060053</cmn:Serial>
        <cmn:Serial>015088202501033321100000060054</cmn:Serial>
        <cmn:Serial>015088202501033321100000060055</cmn:Serial>
        <cmn:Serial>015088202501033321100000060056</cmn:Serial>
        <cmn:Serial>015088202501033321100000060057</cmn:Serial>
        <cmn:Serial>015088202501033321100000060058</cmn:Serial>
        <cmn:Serial>015088202501033321100000060059</cmn:Serial>
    </cmn:NumberList>
    <cmn:ResetContainerAggregation>true</cmn:ResetContainerAggregation>
    <cmn:DisaggregateFromParent>true</cmn:DisaggregateFromParent>
</som:Aggregation>
<som:Disaggregation>
    <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:00</cmn:EventTimeZoneOffset>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <cmn:ParentSerial>015088202501033321100000060020</cmn:ParentSerial>
    <cmn:NumberList>
        <cmn:Serial>015088202501033321100000060021</cmn:Serial>

```

```

        <cmn:Serial>015088202501033321100000060022</cmn:Serial>
    </cmn:NumberList>
</som:Disaggregation>
<som:Disaggregation>
    <cmn:EventDateTime>2019-09-20T06:30:32.12Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:02</cmn:EventTimeZoneOffset>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <cmn:ParentSerial>015088202501033321100000060030</cmn:ParentSerial>
    <cmn:NumberList>
        <cmn:Serial>015088202501033321100000060031</cmn:Serial>
        <cmn:Serial>015088202501033321100000060032</cmn:Serial>
    </cmn:NumberList>
</som:Disaggregation>
</som:MessageBody>
</som:SOMAggregationUpdateMessage>

```

## Errors

| Data Element                                                 | Error Message                                                                 | Description                                                                                         |
|--------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                                               |                                                                               |                                                                                                     |
| choice%1                                                     | At least one instance of either Aggregation or Disaggregation is required !!! | The error occurs if cmn:Aggregation and cmn:Disaggregation are both empty or null.                  |
| cmn:Aggregation   <b>cmn:EventLocation</b>                   | Event location is required !!!                                                | The error occurs if the source is empty or null.                                                    |
| cmn:Aggregation   <b>cmn:EventLocationType</b>               | Valid event location type is required !!!                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| cmn:Aggregation   <b>cmn:ParentSerial</b>                    | Parent serial number is required !!!                                          | The error occurs if the source is empty or null.                                                    |
| cmn:Aggregation   cmn:ParentSerial   <b>@format</b>          | Valid format code is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Aggregation   cmn:ParentSerial   <b>cmn:PackedStatus</b> | Valid packaging level code is required !!!                                    | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:PackagingLevel                                           | Valid packaging level code is required !!!                                    | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:Aggregation   cmn:NumberList   <b>cmn:Serial</b>         | Serial number is required !!!                                                 | The error occurs if the source is empty or null.                                                    |

| Data Element                                                      | Error Message                                                                     | Description                                                                                                                   |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| cmn:Aggregation   cmn:NumberList   cmn:Serial   <b>@format</b>    | Valid format code is required !!!                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| cmn:Aggregation   cmn:ExtensionField   <b>cmn:FieldName</b>       | Field name is required if extension field group present !!!                       | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.                                         |
| cmn:Aggregation   cmn:ExtensionField   <b>cmn:FieldValue</b>      | Field value is required if extension field group present !!!                      | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.                                         |
| cmn:Disaggregation   <b>cmn:EventLocation</b>                     | Event location is required !!!                                                    | The error occurs if the source is empty or null.                                                                              |
| cmn:Disaggregation   <b>cmn:EventLocationType</b>                 | Valid event location type is required !!!                                         | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                           |
| cmn:Disaggregation   cmn:ParentSerial   <b>@format</b>            | Valid format code is required !!!                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| cmn:Disaggregation   cmn:ParentSerial   <b>cmn:PackedStatus</b>   | Valid packaging level code is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| cmn:Disaggregation   cmn:NumberList   <b>cmn:Serial</b>           | Serial number is required !!!                                                     | The error occurs if the source is empty or null.                                                                              |
| cmn:Disaggregation   cmn:NumberList   cmn:Serial   <b>@format</b> | Valid format code is required !!!                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| cmn:Disaggregation   cmn:ExtensionField   <b>cmn:FieldName</b>    | Field name is required if extension field group present !!!                       | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.                                         |
| cmn:Disaggregation   cmn:ExtensionField   <b>cmn:FieldValue</b>   | Field value is required if extension field group present !!!                      | The error occurs if cmn:ExtensionField is populated, but the source is empty or null.                                         |
| <b>Class 2</b>                                                    |                                                                                   |                                                                                                                               |
| cmn:Aggregation   <b>cmn:EventDateTime</b>                        | Event timestamp is earlier than the last event for serial number <Serial Number>. | The error occurs if the source is before the commission event time for cmn:Aggregation   cmn:NumberList   <b>cmn:Serial</b> . |
| cmn:Aggregation   <b>cmn:ParentSerial</b>                         | Serial number <Serial Number> does not exist.                                     | The error occurs if the source does not exist in TraceLink.                                                                   |
|                                                                   | Parent Serial Number <ParentSerial> was not commissioned at this location.        | The error occurs if the source was not commissioned at this subscriber location.                                              |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                    | Description                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| cmn:Aggregation   cmn:NumberList   <b>cmn:Serial</b>                                                                                                              | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                       |
|                                                                                                                                                                   | Serial Number <Serial> cannot be aggregated because it was not commissioned for this location.                                                                                                   | The error occurs if the source was not commissioned at this subscriber location.                                                  |
|                                                                                                                                                                   | Cannot aggregate Serial number <Serial> with UOM <PackagingLevelUOM> into Serial Number <ParentSerial> with UOM <PackagingLevelUOM>.                                                             | The error occurs if the source packaging level is larger than the packaging level for cmn:ParentSerial.                           |
| cmn:Disaggregation   <b>cmn:EventDateTime</b>                                                                                                                     | Event timestamp is earlier than the aggregation date for serial number <Serial>.                                                                                                                 | The error occurs if the source is before the aggregation event time for cmn:Disaggregation   cmn:NumberList   <b>cmn:Serial</b> . |
| cmn:Disaggregation   <b>cmn:EventLocation</b>                                                                                                                     | Authorization Response from server: Credentials are required to access this resource.                                                                                                            | The error occurs if the source cannot be found.                                                                                   |
| cmn:Disaggregation   <b>cmn:ParentSerial</b>                                                                                                                      | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                       |
|                                                                                                                                                                   | Serial number <Serial Number> not commissioned.                                                                                                                                                  | The error occurs if the source was not commissioned at this subscriber location.                                                  |
|                                                                                                                                                                   | Cannot perform operation on serial number [Serial Number] with item state [Serial Number Status]. This operation can only be performed when the serial number is Available or Blocked or Picked. | The error occurs if the source is not in an available, blocked, or picked state.                                                  |
|                                                                                                                                                                   | Serial number <Serial Number> does not have any items aggregated to it.                                                                                                                          | The error occurs if the source has no child serial numbers.                                                                       |
| cmn:Disaggregation   cmn:NumberList   <b>cmn:Serial</b>                                                                                                           | Serial Number <Serial> cannot be disaggregated because it was not previously aggregated to <ParentSerial>.                                                                                       | The error occurs if the source is not a child of cmn:Disaggregation   <b>cmn:ParentSerial</b> .                                   |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                  |                                                                                                                                   |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                  |                                                                                                                                   |

## Aggregation Update (EPCIS v1.2)

### Guidelines

Use this message to capture both aggregation and disaggregation events simultaneously. If the items being disaggregated have a Russia target market, this message initiates the [911 - Unit Pack](#) and [914 - Unit Append](#) reports in addition to the [913 - Unit Extract](#) report.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

ⓘ When choosing to send multiple aggregation events (aggregations, disaggregations, or a combination thereof) at the same time, use the Aggregation Update message instead of individual Aggregation or Disaggregation messages.

**Message Type:** SOM Aggregate Update

**Info Exchange Display Name:** Aggregate Update

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

❗ The MDLP Bulk API currently has a limit of 20 events per message.

| Data Element        |                                     | Occurs Length | Type     | Description                                                                                                                                            |
|---------------------|-------------------------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument |                                     | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                           |
| @schemaVersion      |                                     | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                            |
| @creationDate       |                                     | 1...1<br>1/*  | DateTime | Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                           |
| EPCISHeader         |                                     | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                          |
|                     | sbdh:StandardBusinessDocumentHeader | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification. |

<sup>1</sup>1.2

<sup>2</sup>2019-10-18T22:08:02Z

| Data Element |  |  |                    |                 |            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--------------------|-----------------|------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | sbdh:HeaderVersion |                 |            | 1...1<br>0/*  | String | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to 1.0. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | sbdh:Sender        |                 |            | 1...*<br>-    | -      | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |                    | sbdh:Identifier |            | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. Send SGLN and all other party types with the GS1-conformant URI prefix. For example:<sup>2</sup></p> <ul style="list-style-type: none"> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> <li><a href="urn:epc:id:sgln:088202.867701.0">urn:epc:id:sgln:088202.867701.0</a></li> </ul> <p> GLNs do not have a urn or http prefix.</p>   |
|              |  |  |                    |                 | @Authority | 1...1<br>1/*  | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>3</sup></p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                         |
|              |  |  | sbdh:Receiver      |                 |            | 1...*<br>-    | -      | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |                    | sbdh:Identifier |            | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. Send SGLN and all other party types with the GS1-conformant URI prefix. For example:<sup>4</sup></p> <ul style="list-style-type: none"> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> <li><a href="urn:epc:id:sgln:088202.867701.0">urn:epc:id:sgln:088202.867701.0</a></li> </ul> <p> GLNs do not have a urn or http prefix.</p> |
|              |  |  |                    |                 | @Authority | 1...1<br>1/*  | String | <p><b>Required.</b> The receiver identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>5</sup></p>                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>1.0<sup>2</sup>1100001014507<sup>3</sup>GLN<sup>4</sup>0614141123452<sup>5</sup>GLN

| Data Element |  |  |  |                             |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|-----------------------------|--|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                             |  |               |          | See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | sbdh:DocumentIdentification |  | 1...1         | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | sbdh:Standard               |  | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | sbdh:TypeVersion            |  | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a> . <sup>2</sup>                                                                                                                                                                                                                                         |
|              |  |  |  | sbdh:InstanceIdentifier     |  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>3</sup>                                                                                                                                                                                                                                                                        |
|              |  |  |  | sbdh:Type                   |  | 1...1<br>0/*  | String   | <b>Required.</b> This element identifies the type of the document. The Type must equal <a href="#">Events</a> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | sbdh:CreationDateAndTime    |  | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <a href="#">Z</a> . <sup>5</sup>                                                                                                                                                                                                |
|              |  |  |  | EPCISBody                   |  | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | EventList                   |  | 1...1<br>-    | -        | <b>Required.</b> The EventList supports the following events: <ul style="list-style-type: none"> <li>• <b>AggregationEvent</b> for aggregation</li> <li>• <b>AggregationEvent</b> for disaggregation</li> </ul>                                                                                                                                                                                                                                                                                                |
|              |  |  |  | AggregationEvent            |  | 0...*<br>-    | -        | <b>Required.</b> <b>AggregationEvent</b> is used for both aggregation and disaggregation events. The type of event is defined by the following: <ul style="list-style-type: none"> <li>• For an aggregation event, the following must be true: <ul style="list-style-type: none"> <li>• <b>action</b> = <a href="#">ADD</a></li> <li>• <b>bizStep</b> = <a href="#">urn:epcglobal:cbv:bizstep:packing</a></li> <li>• <b>disposition</b> = <a href="#">urn:epcglobal:cbv:in_progress</a></li> </ul> </li> </ul> |

<sup>1</sup>EPCglobal<sup>2</sup>1.0<sup>3</sup>0000001<sup>4</sup>Events<sup>5</sup>2019-10-18T22:08:02Z

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|---------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |          | <ul style="list-style-type: none"> <li>For a disaggregation event, the following must be true: <ul style="list-style-type: none"> <li><b>action</b> = <code>DELETE</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:unpacking</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:in_progress</code></li> </ul> </li> </ul>                                                                                                                                                                                                                                                                            |
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date or time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of EPCIS1.0.1. The system expects the Z to be appended to the time zone indicator; if it is not present, TraceLink assumes that the time is GMT and therefore appends the Z. <sup>1</sup>                                                                                                                                                                                                                                    |
|              |  |  | eventTimeZoneOffset | 1...1<br>0/*  | DateTime | <b>Required.</b> The time zone offset in effect where the packaging occurs. Default value is <code>+00:00</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | parentID            | 1...1<br>1/*  | String   | <p><b>Conditionally required</b> for an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = <code>ADD</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:packing</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:in_progress</code></li> </ul> <p>Identifier of the parent container in EPC Pure Identity URI format.<br/>Examples:<sup>2</sup></p> <ul style="list-style-type: none"> <li>For an item-to-case aggregation, the EPC of the case.</li> <li>For a case-to-pallet aggregation, the EPC of the pallet.</li> </ul> |
|              |  |  | childEPCs           | 1...1<br>-    | -        | <p><b>Required.</b> List of identifiers of the child items in the parent container in EPC Pure Identity URI format.<br/>Examples:</p> <ul style="list-style-type: none"> <li>For an item-to-case aggregation, the EPCs of the items.</li> <li>For a case-to-pallet aggregation, the EPCs of the cases.</li> </ul>                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>2019-10-18T22:08:02Z<sup>2</sup>urn:epc:id:sgtin:088202.5503022.100000000670

urn:epc:id:sscc:088202.00200000034

http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943

http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002



| Data Element |  |  |  |  |                               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|-------------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | epc                           | 0...<br>0/*   | AnyURI | <b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identity URI format. <sup>1</sup>                                                                                                                                                                                                        |
|              |  |  |  |  | action                        | 1...1<br>1/*  | String | <b>Required.</b> The action taken. <sup>2</sup> <ul style="list-style-type: none"> <li>For an aggregation event, <b>action</b> must equal <b>ADD</b>.</li> <li>For a disaggregation event, <b>action</b> must equal <b>DELETE</b>.</li> </ul>                                                                               |
|              |  |  |  |  | bizStep                       | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step. <sup>3</sup> <ul style="list-style-type: none"> <li>For an aggregation event, <b>bizStep</b> must equal <b>urn:epcglobal:cbv:bizstep:packing</b>.</li> <li>For a disaggregation event, <b>bizStep</b> must equal <b>urn:epcglobal:cbv:bizstep:unpacking</b>.</li> </ul>                 |
|              |  |  |  |  | disposition                   | 0...1<br>0/*  | AnyURI | <b>Required.</b> The status of the message. <sup>4</sup> <ul style="list-style-type: none"> <li>For an aggregation event, <b>disposition</b> must equal <b>urn:epcglobal:cbv:disp:in_progress</b>.</li> <li>For a disaggregation event, <b>disposition</b> must equal <b>urn:epcglobal:cbv:disp:in_progress</b>.</li> </ul> |
|              |  |  |  |  | readPoint                     | 0...1<br>-    | -      | Refers to the location of where the event occurs.                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | id                            | 0...1<br>0/*  | AnyURI | The SGLN EPC of the location from where the event occurs. <sup>5</sup>                                                                                                                                                                                                                                                      |
|              |  |  |  |  | bizLocation                   | 1...1<br>-    | -      | <b>Required.</b> Location of the business.                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | id                            | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location where the objects are following the event. <sup>6</sup>                                                                                                                                                                                                                       |
|              |  |  |  |  | tl:aggregationEventExtensions | 0...1         | -      | Extensions for <b>AggregationEvent</b> .                                                                                                                                                                                                                                                                                    |

<sup>1</sup>urn:epc:id:sgtin:088202.5503022.1000000000670

urn:epc:id:sscc:088202.002000000034

http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943

http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.1000000000002

<sup>2</sup>ADD<sup>3</sup>urn:epcglobal:cbv:bizstep:packing<sup>4</sup>urn:epcglobal:cbv:disp:in\_progress<sup>5</sup>urn:epc:id:sgln:1100001.12345.0<sup>6</sup>urn:epc:id:sgln:1100001.12345.0

| Data Element |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|-------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:packedStatus   | 0...1<br>0/*  | String | <p>The packed status of the item or container.<sup>1</sup></p> <p>See the <a href="#">PackedStatus</a> enumeration list for valid values.</p> <div> <p><b>i</b> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div>     |
|              |  |  |  | tl:quantity       | 0...1<br>-    | Int    | <p>The quantity of child serial numbers aggregated to the parent container.<sup>2</sup></p> <div> <p><b>i</b> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div>                                                       |
|              |  |  |  | tl:filterValue    | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if commissioning a new SSCC. The filter value used in GTIN-14 and SSCC serial numbers.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | tl:packagingLevel | 0...1<br>0/*  | String | <p>The packaging level of the commissioned item.<sup>4</sup></p> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p> <div> <p><b>i</b> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div> |

<sup>1</sup>FULL<sup>2</sup>48<sup>3</sup>1<sup>4</sup>CA

| Data Element |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|------------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:resetContainerAggregation | 0...1<br>-    | Boolean | <p>If set to true, existing child items that are not present in the new <b>childEPCs</b> are disaggregated from their parent container. New child items that are present in the new <b>childEPCs</b> are then aggregated to the parent container.<sup>1</sup></p> <p>If a value is not specified, defaults to false.</p> <div> <p> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = "ADD"</li> <li>• <b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li>• <b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div> |
|              |  |  |  | tl:disaggregateFromParent    | 1...1<br>-    | Boolean | <p><b>Required.</b> If set to true, the existing aggregation of the child items is adjusted and the items are aggregated to the new parent container (i.e. TraceLink performs an implicit disaggregation and then aggregates the items).<sup>2</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:plantLocationId           | 0...1<br>0/*  | String  | <p>Plant location identifier.<sup>3</sup></p> <div> <p> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = "ADD"</li> <li>• <b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li>• <b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div>                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:productionLineId          | 0...1<br>0/*  | String  | <p>The name of the production line where the packaging occurs.<sup>4</sup></p> <div> <p> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = "ADD"</li> <li>• <b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li>• <b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> </div>                                                                                                                                                                                                                                          |

<sup>1</sup>true<sup>2</sup>true<sup>3</sup>0333331013655<sup>4</sup>12436587

| Data Element |  |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|--|--------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:lineManagerName | 0...1<br>0/*  | String | <p>The name of the line or production manager who is on shift when the batch is produced.<sup>1</sup></p> <p> Use for only an aggregation event when aggregating, i.e. when the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = "ADD"</li> <li><b>bizStep</b> = "urn:epcglobal:cbv:bizstep:packing"</li> <li><b>disposition</b> = "urn:epcglobal:cbv:disp:in_progress"</li> </ul> |
|              |  |  |  |  | tl:extensionField  | 0...*<br>-    | -      | <p>Extension to pass 1 or more name value pairs containing additional data attributes that are not already supported in this message.</p> <p> The <b>tl:extensionField</b> element group is not stored by TraceLink, and is used only when a trade partner requires additional information (e.g. when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer).</p>              |
|              |  |  |  |  | tl:fieldName       | 1...1<br>1/*  | String | <p><b>Required.</b> Populate with the field name provided by the trade partner that receives the outbound message.</p> <p> <b>tl:fieldName</b> is case sensitive and must match the field name provided by the trade partner exactly.</p>                                                                                                                                                                       |
|              |  |  |  |  | tl:fieldValue      | 1...1<br>1/*  | String | <b>Required.</b> The field value that corresponds to the <b>tl:fieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:tl="http://epcis.tracelink.com/ns" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2019-10-18T17:45:20.00Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">0882028677019</sbdh:Identifier>
      </sbdh:Sender>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>Fred Bobbit

```

<sbdh:Receiver>
  <sbdh:Identifier Authority="GLN">0333331013655</sbdh:Identifier>
</sbdh:Receiver>
<sbdh:DocumentIdentification>
  <sbdh:Standard>EPCglobal</sbdh:Standard>
  <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
  <sbdh:InstanceIdentifier>201901311745200001</sbdh:InstanceIdentifier>
  <sbdh:Type>Events</sbdh:Type>
  <sbdh:CreationDateAndTime>2019-10-18T17:45:20.00Z</sbdh:CreationDateAndTime>
</sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <AggregationEvent>
      <eventTime>2019-10-18T22:08:02Z</eventTime>
      <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
      <parentID>urn:epc:id:sscc:088202.00200000034</parentID>
      <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060001</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060002</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060003</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060004</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060005</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060006</epc>
      </childEPCs>
      <action>ADD</action>
      <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
      <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
      <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
      </bizLocation>
      <tl:aggregationEventExtensions>
        <tl:packedStatus>FULL</tl:packedStatus>
        <tl:quantity>50</tl:quantity>
        <tl:packagingLevel>CA</tl:packagingLevel>
        <tl:resetContainerAggregation>true</tl:resetContainerAggregation>
        <tl:disaggregateFromParent>true</tl:disaggregateFromParent>
        <tl:plantLocationId>0333331013655</tl:plantLocationId>
        <tl:productionLineId>12436587</tl:productionLineId>
      </tl:aggregationEventExtensions>
    </AggregationEvent>
  </EventList>
</EPCISBody>
</EPCIS>

```

```

        <tl:lineManagerName>Fred Bobbit</tl:lineManagerName>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>
    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:088202.00200000034</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060007</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060008</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060009</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060010</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060011</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060012</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
    </bizLocation>
    <tl:aggregationEventExtensions>
        <tl:packedStatus>FULL</tl:packedStatus>
        <tl:quantity>50</tl:quantity>
        <tl:packagingLevel>CA</tl:packagingLevel>
        <tl:resetContainerAggregation>true</tl:resetContainerAggregation>
        <tl:disaggregateFromParent>true</tl:disaggregateFromParent>
        <tl:plantLocationId>0333331013655</tl:plantLocationId>
        <tl:productionLineId>12436587</tl:productionLineId>
        <tl:lineManagerName>Fred Bobbit</tl:lineManagerName>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>
    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:088202.00200000035</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060107</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060108</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060109</epc>

```

```

        <epc>urn:epc:id:sgtin:0882025.501033.100000060110</epc>
    </childEPCs>
    <action>DELETE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
    </bizLocation>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>
    <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:088202.002000000035</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060013</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060014</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060015</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060016</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060017</epc>
        <epc>urn:epc:id:sgtin:0882025.501033.100000060018</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
    </bizLocation>
    <tl:aggregationEventExtensions>
        <tl:packedStatus>FULL</tl:packedStatus>
        <tl:quantity>50</tl:quantity>
        <tl:packagingLevel>CA</tl:packagingLevel>
        <tl:resetContainerAggregation>true</tl:resetContainerAggregation>
        <tl:disaggregateFromParent>true</tl:disaggregateFromParent>
        <tl:plantLocationId>0333331013655</tl:plantLocationId>
        <tl:productionLineId>12436587</tl:productionLineId>
        <tl:lineManagerName>Fred Bobbit</tl:lineManagerName>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2019-10-18T22:08:02Z</eventTime>

```

```

<eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
<parentID>urn:epc:id:sscc:088202.00200001035</parentID>
<childEPCs>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060207</epc>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060208</epc>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060209</epc>
  <epc>urn:epc:id:sgtin:0882025.501033.100000060210</epc>
</childEPCs>
<action>DELETE</action>
<bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
<disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
<bizLocation>
  <id>urn:epc:id:sgln:7777776.67345.0</id>
</bizLocation>
</AggregationEvent>
<AggregationEvent>
  <eventTime>2019-10-18T22:08:02Z</eventTime>
  <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
  <parentID>urn:epc:id:sscc:088202.00200002035</parentID>
  <childEPCs>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060307</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060308</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060309</epc>
    <epc>urn:epc:id:sgtin:0882025.501033.100000060310</epc>
  </childEPCs>
  <action>DELETE</action>
  <bizStep>urn:epcglobal:cbv:bizstep:unpacking</bizStep>
  <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
  <bizLocation>
    <id>urn:epc:id:sgln:7777776.67345.0</id>
  </bizLocation>
</AggregationEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```



# Aggregation Update (SOAP)

## Aggregation Update Request

### Guidelines

The Aggregation Update message allows Pharmaceutical Manufacturer Owners to report the aggregation and disaggregation of product simultaneously to account for warehouse packing activities. Each message can contain multiple aggregations or disaggregations.

❗ When sending multiple aggregation events (i.e. aggregations, disaggregations, or a combination thereof) at the same time, use this message instead of individual Aggregation or Disaggregation messages.

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

❗ The MDLP Bulk API currently has a limit of 20 events per message.

The following data is sent in the request to TraceLink:

| Elements         |                |                          | Occurs Length | Type | Notes                                                                                       |
|------------------|----------------|--------------------------|---------------|------|---------------------------------------------------------------------------------------------|
| soapenv:Envelope |                |                          | 1...1<br>-    | -    | <b>Required.</b> The SOAP envelope root element.                                            |
|                  | soapenv:Header |                          | 1...1<br>-    | -    | <b>Required.</b> Not used. The SOAP message header.                                         |
|                  | soapenv:Body   |                          | 1...1<br>-    | -    | <b>Required.</b> The SOAP message body.                                                     |
|                  |                | urn:AggregateUpdate      | 1...1<br>-    | -    | <b>Required.</b> Aggregation Update message.                                                |
|                  |                | AggregationUpdateRequest | 0...1<br>-    | -    | <b>Required.</b> Aggregate request to associate child serial numbers to a parent container. |

| Elements |  |  |  |               |            | Occurs Length | Type   | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|--|--|--|---------------|------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  | Aggregations  |            | 0...*<br>-    | -      | Aggregation group element.                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          |  |  |  | Aggregation   |            | 0...*<br>-    | -      | <b>Required.</b> Aggregation event. See the Aggregation   <b>Strict</b> element for important configuration information.                                                                                                                                                                                                                                                                                                                                  |
|          |  |  |  | Container     |            | 1...1<br>-    | -      | <b>Required.</b> Parent container serial information. If the Aggregation   <b>Container</b> is specified, all items must currently be a child of the specified container.                                                                                                                                                                                                                                                                                 |
|          |  |  |  |               | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Parent container's serial number. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                           |
|          |  |  |  |               | @namespace | 0...1<br>0/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  | Items         |            | 1...1<br>-    | -      | <b>Required.</b> Child serial information.                                                                                                                                                                                                                                                                                                                                                                                                                |
|          |  |  |  |               | Item       | 1...*<br>-    | -      | <b>Required.</b> List of one or more child serial numbers to aggregate to parent container's serial number.                                                                                                                                                                                                                                                                                                                                               |
|          |  |  |  |               | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Child serial number in one of the following formats: <ul style="list-style-type: none"> <li>AI(01)+AI(21) formatted numbers are: 01 + [GTIN14] + 21 + [serial number]<br/>Ex: <b>015088202503022521100000090109</b></li> <li>AI(00) formatted numbers are: 00 + [SSCC18 code]<br/>Ex: <b>00008820200000047506</b></li> <li>CN-EDMC formatted serial numbers are: 20 digit China EDMC code<br/>Ex: <b>81530070000022519351</b></li> </ul> |
|          |  |  |  |               | @namespace | 0...1<br>1/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  | EventDateTime |            | 0...1<br>-    | Date   | Timestamp of the date and time of the aggregation event with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. If omitted, the system will record the current date and time. <sup>2</sup>                                                                                                                                                                                                                                                     |

<sup>1</sup>00008820200000047506<sup>2</sup>2021-12-21T11:16:52.575Z

| Elements |  |  |  |  |                      | Occurs Length | Type    | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|--|--|--|--|----------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  |  | Location             | 0...1<br>1/*  | String  | Site-level SGLN of the location where the event occurred. The SGLN format is the numeric component only, with urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events). <sup>1</sup>                                                                                                                                                                                                              |
|          |  |  |  |  | Strict               | 1...1<br>-    | Boolean | <b>Required.</b> Flag that determines if the system performs an implicit disaggregation and then aggregates the items.<br>Valid values: <ul style="list-style-type: none"> <li>If <b>true</b>, the aggregated item(s) must not already have a parent. If they do, an error will be returned.</li> <li>If <b>false</b>, the items are re-associated to the new parent and the items' previous aggregations are adjusted.</li> </ul>                             |
|          |  |  |  |  | ResetAggregation     | 0...1<br>-    | Boolean | Flag indicating to disaggregate all existing items in a container and aggregate the new set of items into that container.<br>Valid values: <ul style="list-style-type: none"> <li>If <b>true</b>, TraceLink disaggregates all existing items in the specified container and aggregates the new set of items into that container.</li> <li>If <b>false</b> (default), TraceLink does not disaggregate all existing items in the specified container.</li> </ul> |
|          |  |  |  |  | ParentCompanyPrefix  | 0...1<br>-    | String  | <b>Conditionally required</b> if the container serial number is unknown to TraceLink and must be commissioned. The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                 |
|          |  |  |  |  | ParentFilterValue    | 0...1<br>-    | String  | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                      |
|          |  |  |  |  | ParentFormat         | 0...1<br>-    | String  | <b>Conditionally required</b> if the container serial number is unknown to TraceLink and must be commissioned. The format of the parent serial numbers.<br>Valid values: <ul style="list-style-type: none"> <li><b>AI(01)+AI(21)</b></li> <li><b>AI(00)</b></li> <li><b>CN-EDMC</b></li> </ul>                                                                                                                                                                 |
|          |  |  |  |  | ParentPackagingLevel | 0...1         | String  | The packaging level of the commissioned item using the supported enumeration values. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>8888882.02867.0<sup>2</sup>PL

| Elements |  |  |  |                 |                |            | Occurs Length | Type   | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|--|--|--|-----------------|----------------|------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  |                 |                |            |               |        | See the <a href="#">PackLevel</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                      |
|          |  |  |  | Disaggregations |                |            | 0...*<br>-    | -      | Disaggregation group header.                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          |  |  |  |                 | Disaggregation |            | 1...*<br>-    | -      | <b>Required.</b> Disaggregation event.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |  |  |  |                 | Container      |            | 0...*<br>-    | -      | <b>Conditionally required</b> if Disaggregation   <b>Strict</b> is set to <b>true</b> . Parent container serial number. If Disaggregation   <b>Container</b> is specified, all items must currently be a child of the specified container. If omitted, Disaggregation   <b>Strict</b> must be set to <b>false</b> .                                                                                                                                       |
|          |  |  |  |                 |                | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Parent serial number. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                       |
|          |  |  |  |                 |                | @namespace | 0...1<br>1/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  |                 | Items          |            | 1...1<br>-    | -      | <b>Required.</b> Child serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|          |  |  |  |                 |                | Item       | 1...*<br>-    | -      | <b>Required.</b> List of one or more child serial numbers to disaggregate from the parent container serial number.                                                                                                                                                                                                                                                                                                                                        |
|          |  |  |  |                 |                | @sn        | 1...1<br>1/*  | String | <b>Required.</b> Child serial number in one of the following formats: <ul style="list-style-type: none"> <li>AI(01)+AI(21) formatted numbers are: 01 + [GTIN14] + 21 + [serial number]<br/>Ex: <b>015088202503022521100000090109</b></li> <li>AI(00) formatted numbers are: 00 + [SSCC18 code]<br/>Ex: <b>00008820200000047506</b></li> <li>CN-EDMC formatted serial numbers are: 20 digit China EDMC code<br/>Ex: <b>81530070000022519351</b></li> </ul> |
|          |  |  |  |                 |                | @namespace | 0...1<br>1/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          |  |  |  |                 | EventDateTime  |            | 0...1<br>-    | Date   | <b>Required.</b> Timestamp of the date and time of the disaggregation event with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.sZ format. If omitted, the system will record the current date and time. <sup>2</sup>                                                                                                                                                                                                                                 |

<sup>1</sup>00008820200000047506<sup>2</sup>2021-12-21T11:16:52.575Z

| Elements |  |  |  |  |          | Occurs Length | Type    | Notes                                                                                                                                                                                                                                                                                                                                                          |
|----------|--|--|--|--|----------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |  |  |  |  | Location | 0...1<br>1/*  | String  | <b>Required.</b> Site-level SGLN of the location where the event occurred. SGLN format is the numeric component only, with urn prefix stripped (e.g. <code>8888882.02867.0</code> instead of <code>urn:epc:id:sgln:8888882.02867.0</code> typically found in EPCIS events). <sup>1</sup>                                                                       |
|          |  |  |  |  | Strict   | 1...1<br>-    | Boolean | Flag that determines whether Disaggregation   <b>Container</b> must be provided. <ul style="list-style-type: none"> <li>If <code>true</code>, the parent container must be specified.</li> <li>If <code>false</code>, the parent container is not specified and the child serial numbers are implicitly disaggregated from their parent containers.</li> </ul> |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:AggregateUpdate>
      <AggregationUpdateRequest>
        <completed>false</completed>
        <Aggregations>
          <Aggregation>
            <Container sn="016862905203607821100000000030"/>
            <Items>
              <Item sn="018862905202566321100000000005"/>
            </Items>
            <EventDateTime>2020-12-31T11:16:52.575Z</EventDateTime>
            <Location>86290520.4996.0</Location>
            <Strict>true</Strict>
            <ResetAggregation>false</ResetAggregation>
            <IsCommissionSSCC>false</IsCommissionSSCC>
          </Aggregation>
        </Aggregations>
        <Disaggregations>
          <Disaggregation>
            <Container sn="016862905203607821100000000030"/>
            <Items>
```

<sup>1</sup>8888882.02867.0

```

        <Item sn="018862905202566321100000000005"/>
      </Items>
      <EventDateTime>2020-12-31T11:18:53.193Z</EventDateTime>
      <Location>86290520.4996.0</Location>
      <Strict>true</Strict>
    </Disaggregation>
  </Disaggregations>
</AggregationUpdateRequest>
</urn:AggregateUpdate>
</soapenv:Body>
</soapenv:Envelope>

```

Errors

| Exception Code | Exception Message                                                                                                                                                                                |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VALIDATION     | Serial number <Serial Number> does not exist.                                                                                                                                                    |
|                | Cannot aggregate Serial number <Serial> with UOM <PackagingLevelUOM> into Serial Number <ParentSerial> with UOM <PackagingLevelUOM>.                                                             |
|                | Serial number <Serial Number> is already aggregated to <Actual Parent Serial Number>.                                                                                                            |
|                | Cannot perform operation on serial number [Serial Number] with item state [Serial Number Status]. This operation can only be performed when the serial number is Available or Blocked or Picked. |
|                | Serial Number <Serial> cannot be disaggregated because it was not previously aggregated to <ParentSerial>.                                                                                       |
|                | Event timestamp is earlier than the aggregation date for serial number <Serial>.                                                                                                                 |

Aggregation Update Response

Guidelines

 The MDLP Bulk API currently has a limit of 20 events per message.

The following data is included in the message response:

| Data Element          |  |  |  |  | Occurs Length | Type   | Description                                                                                                                                                              |
|-----------------------|--|--|--|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S:Envelope            |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The SOAP Envelope root element.                                                                                                                         |
| S:Body                |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The SOAP Message Body.                                                                                                                                  |
| ns2:AggregateResponse |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The Aggregation Update response message.                                                                                                                |
| TLResponse            |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> The TraceLink response.                                                                                                                                 |
| Success               |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> Indicates if the Aggregation Update request successfully processed. <sup>1</sup>                                                                        |
| ExceptionReturn       |  |  |  |  | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>Success</b> = <code>false</code> . Populated with error information only if <b>Success</b> = <code>false</code> , otherwise omitted. |
| CallException         |  |  |  |  | 1...*<br>-    | -      | <b>Required.</b> Contains error information including the exception code and error message, if available.                                                                |
| ExceptionCode         |  |  |  |  | 1...1<br>0/*  | String | <b>Required.</b> Error code.                                                                                                                                             |
| ExceptionMessage      |  |  |  |  | 0...1<br>0/*  | String | <b>Conditionally required</b> if an error occurred. Message that further describes error condition, if available.                                                        |

## Example

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns3:AggregateUpdateResponse xmlns:ns2="http://tracelink.com/som" xmlns:ns3="urn:tracelink:soap">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns3:AggregateUpdateResponse>
  </S:Body>
</S:Envelope>
```

<sup>1</sup>true

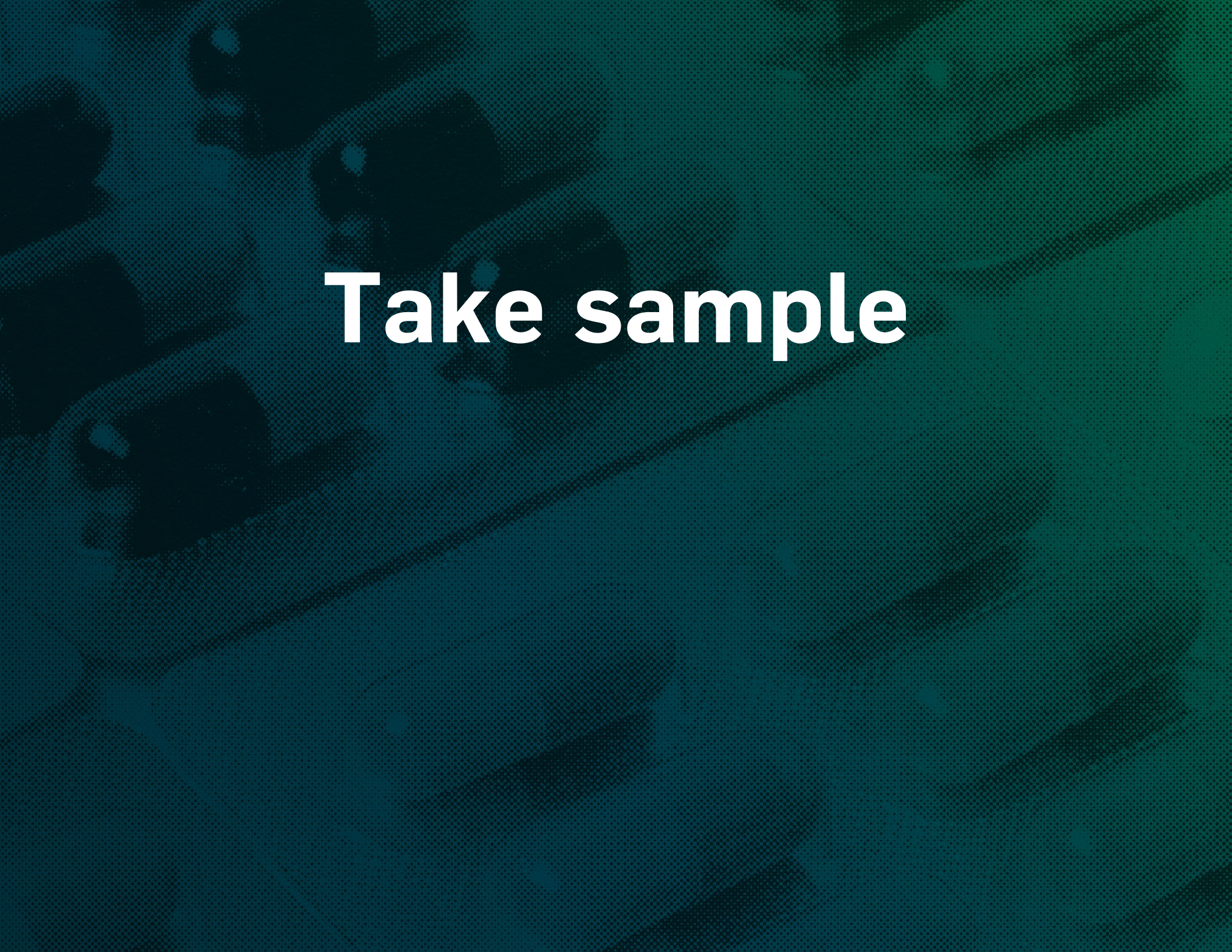
# Errors

| Data Element      | Error Message                                                                     | Description                                                                                                     |
|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Class 1           |                                                                                   |                                                                                                                 |
| AggregationEvent  | At least one aggregation event is required !!!                                    | The error occurs if no <b>AggregationEvent</b> is present.                                                      |
| parentID          | Invalid EPC format !!!                                                            | The error occurs if the source is invalid.                                                                      |
| epc               | Invalid EPC format !!!                                                            | The error occurs if the source is invalid or is empty or null.                                                  |
| action            | Action ADD is required for aggregation !!!                                        | The error occurs if the source does not equal "ADD" for an aggregation event.                                   |
|                   | Action DELETE is required for disaggregation !!!                                  | The error occurs if the source does not equal "DELETE" for a disaggregation event.                              |
| bizStep           | bizStep urn:epcglobal:cbv:bizstep:packing is required for aggregation !!!         | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing" for an aggregation event.     |
|                   | bizStep urn:epcglobal:cbv:bizstep:unpacking is required for disaggregation !!!    | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:unpacking" for a disaggregation event. |
| disposition       | Disposition urn:epcglobal:cbv:disp:in_progress is required for aggregation !!!    | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress" for an aggregation event.    |
|                   | Disposition urn:epcglobal:cbv:disp:in_progress is required for disaggregation !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress" for a disaggregation event.  |
| bizLocation   id  | Business location is required !!!                                                 | The error occurs if the source is empty or null.                                                                |
|                   | Valid business location identifier type is required !!!                           | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.             |
| tl:packedStatus   | Valid packed status is required !!!                                               | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| tl:packagingLevel | Valid packaging level code is required !!!                                        | The error occurs if the source is invalid.                                                                      |
| tl:fieldName      | Field name is required if extension field group is present !!!                    | The error occurs if <b>tl:extensionField</b> is populated, but the source is empty or null.                     |
| tl:fieldValue     | Field value is required if extension field group present !!!                      | The error occurs if <b>tl:extensionField</b> is populated, but the source is empty or null.                     |



| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                    | Description                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 2</b>                                                                                                                                                    |                                                                                                                                                                                                  |                                                                                                                                                |
| AggregationEvent (aggregation event)   <b>eventTime</b>                                                                                                           | Event timestamp is earlier than the last event for serial number <Serial Number>.                                                                                                                | The error occurs if the source is before the commission event time for AggregationEvent (aggregation event)   <b>parentID</b> .                |
| AggregationEvent (disaggregation event)   <b>eventTime</b>                                                                                                        | Event timestamp is earlier than the aggregation date for serial number <Serial>.                                                                                                                 | The error occurs if the source is before the aggregation event time for AggregationEvent (disaggregation event)   <b>parentID</b> .            |
| AggregationEvent (aggregation event)   <b>parentID</b>                                                                                                            | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                                    |
|                                                                                                                                                                   | Parent Serial Number <ParentSerial> was not commissioned at this location.                                                                                                                       | The error occurs if the source was not commissioned at this subscriber location.                                                               |
| AggregationEvent (disaggregation event)   <b>parentID</b>                                                                                                         | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                                    |
|                                                                                                                                                                   | Serial number <Serial Number> not commissioned.                                                                                                                                                  | The error occurs if the source was not commissioned at this subscriber location.                                                               |
|                                                                                                                                                                   | Cannot perform operation on serial number [Serial Number] with item state [Serial Number Status]. This operation can only be performed when the serial number is Available or Blocked or Picked. | The error occurs if the source is not in an available, blocked, or picked status.                                                              |
|                                                                                                                                                                   | Serial number <Serial Number> does not have any items aggregated to it.                                                                                                                          | The error occurs if the source has no child serial numbers.                                                                                    |
| Aggregation Event (aggregation event)   childEPCs   <b>epc</b>                                                                                                    | Serial number <Serial Number> does not exist.                                                                                                                                                    | The error occurs if the source does not exist in TraceLink.                                                                                    |
|                                                                                                                                                                   | Serial Number <Serial> cannot be aggregated because it was not commissioned for this location.                                                                                                   | The error occurs if the source was not commissioned at this subscriber location.                                                               |
|                                                                                                                                                                   | Cannot aggregate Serial number <Serial> with UOM <PackagingLevelUOM> into Serial Number <ParentSerial> with UOM <PackagingLevelUOM>.                                                             | The error occurs if the source packaging level is larger than the packaging level for AggregationEvent (aggregation event)   <b>parentID</b> . |
| Aggregation Event (disaggregation event)   childEPCs   <b>epc</b>                                                                                                 | Serial Number <Serial> cannot be disaggregated because it was not previously aggregated to <ParentSerial>.                                                                                       | The error occurs if the source is not aggregated to AggregationEvent (disaggregation event)   <b>parentID</b> .                                |
| AggregationEvent (disaggregation event)   bizLocation   <b>id</b>                                                                                                 | Authorization Response from server: Credentials are required to access this resource.                                                                                                            | The error occurs if the source cannot be found.                                                                                                |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                  |                                                                                                                                                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                  |                                                                                                                                                |





# Take sample





# Take sample APIs

## Why do I use these messages?

Use the following messages to mark product as sampled for quality assurance or inspection by government authorities.

## Which report do these messages generate?

These messages generate the [552 - Withdrawal](#) report in the Russia Compliance application if their contents meet the report conditions.

 TraceLink disaggregates the sampled product if the serial numbers are aggregated to parent containers, which prompts a disaggregation event and initiates the [913 - Unit Extract](#) report.

# Take Product Sample (XML)

## Guidelines

**Message Type:** SOM\_TAKE\_SAMPLE

**Info Exchange Display Name:** Take Product Sample

 When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element             |                       | Occurs Length | Type | Description                                                              |
|--------------------------|-----------------------|---------------|------|--------------------------------------------------------------------------|
| som:SOMTakeSampleMessage |                       | 1...1<br>-    | -    | <b>Required.</b> The root element of the Take Product Sample message.    |
|                          | som:ControlFileHeader | 1...1<br>-    | -    | <b>Required.</b> The message document's header information. <sup>1</sup> |

<sup>1</sup>1.2

| Data Element |                 |                         |            |                | Occurs Length  | Type                                                    | Description                                                                                                                                                                                                                                           |
|--------------|-----------------|-------------------------|------------|----------------|----------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                 | cmn:FileSenderNumber    |            |                | 1...1<br>1/20  | String                                                  | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup>                                                                                                                                                                            |
|              |                 | cmn:FileReceiverNumber  |            |                | 1...1<br>1/20  | String                                                  | <b>Required.</b> The company identifier of the file's recipient. <sup>2</sup>                                                                                                                                                                         |
|              |                 | cmn:FileControlNumber   |            |                | 1...1<br>1/20  | String                                                  | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>3</sup>                                                                                                                    |
|              |                 | cmn:FileDate            |            |                | 1...1<br>10/10 | Date                                                    | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>4</sup>                                                                                                                                  |
|              |                 | cmn:FileTime            |            |                | 1...1<br>9/9   | Time                                                    | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>5</sup>            |
|              | som:MessageBody |                         |            | 1...1<br>-     | -              | <b>Required.</b> Contains the main body of the message. |                                                                                                                                                                                                                                                       |
|              |                 | cmn:EventDateTime       |            |                | 1...1<br>0/*   | Datetime                                                | <b>Required.</b> Timestamp of the date and time when the serial number is commissioned to the object with the UTC time zone indicator in XML YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>6</sup>                                                             |
|              |                 | cmn:EventTimeZoneOffset |            |                | 1...1<br>0/*   | String                                                  | <b>Required.</b> Event time zone offset. Default value is +00:00 if the source is not populated. <sup>7</sup>                                                                                                                                         |
|              |                 | cmn:NumberList          |            |                | 1...1<br>1/*   | String                                                  | <b>Required.</b> Contains the list of serial numbers whose statuses are being updated.                                                                                                                                                                |
|              |                 |                         | cmn:Serial |                | 1...*<br>1/*   | String                                                  | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(01)(21) formatted serial number for GTINs. Non-GS1 serial numbers (e.g. China) are expressed in native format. <sup>8</sup> |
|              |                 |                         |            | @companyPrefix | 0...1          | String                                                  | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                       |

<sup>1</sup>8888882028655<sup>2</sup>8888882028677<sup>3</sup>2019-03-21T06:31:32Z<sup>4</sup>2019-03-21<sup>5</sup>06:31:32Z<sup>6</sup>2019-03-21T06:31:32Z<sup>7</sup>+00:00<sup>8</sup>015088202501033321100000060001

| Data Element |  |                           |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                              |
|--------------|--|---------------------------|--|--------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                           |  | @filterValue | 0...1<br>0/*  | String | The filter value used in GTIN-14 serial numbers.                                                                                                                                                                                                                                                         |
|              |  |                           |  | @format      | 0...1<br>1/*  | String | Identifies the format of the serial numbers. Valid values: <ul style="list-style-type: none"> <li>AI ( 01 ) + AI ( 21 )</li> <li>CN - EDMC</li> </ul>                                                                                                                                                    |
|              |  | cmn:EventLocation         |  |              | 0...1<br>0/34 | String | Site-level SGLN or another party type of the location where the event occurs. SGLN and other party type formats are the numeric component only. If there is an urn prefix, it is stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events. <sup>1</sup> |
|              |  | cmn:EventLocationType     |  |              | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:EventLocation</b> is present. Business or location type of the event location identifier. <sup>2</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                       |
|              |  | cmn:TakeSampleReasonCode  |  |              | 0...1<br>0/*  | String | <b>Required.</b> Reason identifying why a serial number status is updated. <sup>3</sup><br>See the <a href="#">TakeSampleReasonCode</a> enumeration list for valid values.                                                                                                                               |
|              |  | cmn:ReasonDescription     |  |              | 0...1<br>0/*  | String | Text description of the reason for status update. <sup>4</sup>                                                                                                                                                                                                                                           |
|              |  | cmn:InspectionCountryCode |  |              | 0...1<br>1/*  | String | The country where the inspection is being performed using the standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>5</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                               |
|              |  | cmn:SamplingPartyId       |  |              | 0...1<br>0/*  | String | <b>Required.</b> The business or location identifier for the entity performing the sampling. <sup>6</sup>                                                                                                                                                                                                |

<sup>1</sup>8888882028655<sup>2</sup>GLN<sup>3</sup>QUALITY\_CONTROL<sup>4</sup>Released by Quality<sup>5</sup>US<sup>6</sup>0882028677010

| Data Element |  |  |       | Occurs Length | Type   | Description                                                                                                                                                                                |
|--------------|--|--|-------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | @type | 1..1<br>1/*   | String | <b>Required.</b> The business or location type for the quality control entity identifier. <sup>1</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMTakeSampleMessage xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>0000000001</cmn:FileControlNumber>
    <cmn:FileDate>2019-03-21</cmn:FileDate>
    <cmn:FileTime>06:31:32Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <cmn:EventDateTime>2019-03-21T06:31:32Z</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+00:00</cmn:EventTimeZoneOffset>
    <cmn:NumberList>
      <cmn:Serial companyPrefix="1508820" filterValue="1" format="AI(01)+AI
(21)">015088202501033321100000060001</cmn:Serial>
      <cmn:Serial companyPrefix="1508820" filterValue="1" format="AI(01)+AI
(21)">015088202501033321100000060002</cmn:Serial>
      <cmn:Serial companyPrefix="1508820" filterValue="1" format="AI(01)+AI
(21)">015088202501033321100000060003</cmn:Serial>
      <cmn:Serial companyPrefix="1508820" filterValue="1" format="AI(01)+AI
(21)">015088202501033321100000060004</cmn:Serial>
      <cmn:Serial companyPrefix="1508820" filterValue="1" format="AI(01)+AI
(21)">015088202501033321100000060005</cmn:Serial>
    </cmn:NumberList>
    <cmn:EventLocation>8888882028655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
  </som:MessageBody>
</som:SOMTakeSampleMessage>
```

<sup>1</sup>GLN

```

    <cmn:TakeSampleReasonCode>SELECTIVE_CONTROL</cmn:TakeSampleReasonCode>
    <cmn:ReasonDescription>Released by Quality</cmn:ReasonDescription>
    <cmn:InspectionCountryCode>US</cmn:InspectionCountryCode>
    <cmn:SamplingPartyId type="GLN">0882028677010</cmn:SamplingPartyId>
  </som:MessageBody>
</som:SOMTakeSampleMessage>

```

## Errors

| Data Element                | Error Message                                          | Description                                                                                   |
|-----------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Class 1</b>              |                                                        |                                                                                               |
| cmn:EventDateTime           | Event date time is required !!!                        | The error occurs if the source is empty or null.                                              |
| cmn:NumberList              | At least one serial number is required !!!             | The error occurs if the source is empty or null.                                              |
| cmn:Serial                  | At least one serial number is required !!!             | The error occurs if the source is empty or null.                                              |
| cmn:EventLocationType       | Valid event location type is required !!!              | The error occurs if the source is empty or null.                                              |
| cmn:TakeSampleBusinessCode  | Valid take sample reason code required !!!             | The error occurs if the source is empty or null.                                              |
| cmn:InspectionCountryCode   | Inspection Country Code must be two characters !!!     | The error occurs if the source is present, but the length does not equal two characters.      |
| cmn:SamplingPartyId   @type | Valid sampling party identifier type is required !!!   | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                             | Valid sampling party identifier type is required !!!   | The error occurs if the source is empty or null.                                              |
| <b>Class 2</b>              |                                                        |                                                                                               |
| cmn:ReasonDescription       | Reason Code is required for products sampled in Russia | The error occurs if cmn:InspectionCountryCode = "RU" but the source is empty or null.         |



| Data Element                                                                                                                                                      | Error Message                                                                                                          | Description                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| cmn:Serial                                                                                                                                                        | Serial Number <SerialNumber> does not exist.                                                                           | The error occurs if the source is empty or null.                                                                               |
|                                                                                                                                                                   | Serial number <Serial Number> is not commissioned.                                                                     | The error occurs if Status is not Commissioned.                                                                                |
|                                                                                                                                                                   | Serial number <Serial Number> is not associated with Location <Location Name>.                                         | The error occurs if the source is associated with a company or location that differs from the transaction company or location. |
|                                                                                                                                                                   | Cannot update the status on serial number <Serial Number> with UOM <PackagingLevelUOM>. Serial numbers must be Eaches. | The error occurs if the epc packaging level being sampled is not an Each.                                                      |
|                                                                                                                                                                   | Operation could not be performed because serial number <Serial Number> is not empty.                                   | The error occurs if packaging level UOM is not set, but the EPC has child EPCs.                                                |
| cmn:SamplingPartyId                                                                                                                                               | Field is not populated and Country of Inspection = RU ("Russia")                                                       | The error occurs if cmn:InspectionCountryCode = "RU" but the source is empty or null.                                          |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                        |                                                                                                                                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                        |                                                                                                                                |

## Take Product Sample (EPCIS v1.2)

### Guidelines

**Message Type:** SOM\_TAKE\_SAMPLE

**Info Exchange Display Name:** Take Product Sample

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element        | Occurs Length | Type | Description                                  |
|---------------------|---------------|------|----------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -    | <b>Required.</b> EPCIS message root element. |

| Data Element                        |  |  |  |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------|--|--|--|--|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| @schemaVersion                      |  |  |  |  | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| @creationDate                       |  |  |  |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EPCISHeader                         |  |  |  |  | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| sbdh:StandardBusinessDocumentHeader |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| sbdh:HeaderVersion                  |  |  |  |  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <a href="#">1.0</a> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| sbdh:Sender                         |  |  |  |  | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                      |
| sbdh:Identifier                     |  |  |  |  | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li><a href="#">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> <div>  GLNs do not have an urn/http prefix. </div> |
| @Authority                          |  |  |  |  | 1...1<br>1/*  | String   | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>5</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                 |
| sbdh:Receiver                       |  |  |  |  | 1...*<br>-    | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>1.2<sup>2</sup>2019-03-31T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |  |                             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|-----------------------------|--------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             | sbdh:Identifier          | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> <div>  GLNs do not have an urn/http prefix. </div> |
|              |  |  |                             | @Authority               | 1...1<br>1/*  | String   | <p><b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to "GLN" for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>2</sup> See the <a href="#">MDPartyTypeEnum</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                      |
|              |  |  | sbdh:DocumentIdentification |                          | 1...1<br>-    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |                             | sbdh:Standard            | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <code>EPCglobal</code> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |                             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <code>1.0</code> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |                             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                             | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> The document type. The Type value is set to "Events" for a take product sample event. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |                             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <code>Z</code> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <code>Z</code> . <sup>7</sup>                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCglobal<sup>4</sup>1.0<sup>5</sup>000001<sup>6</sup>Events<sup>7</sup>2018-04-30T22:08:02Z

| Data Element        |  |  |  |  | Occurs Length    | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|--|--|--|--|------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPCISBody           |  |  |  |  | 1...1<br>-       | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                         |
| EventList           |  |  |  |  | 1...1<br>-       | -        | <b>Required.</b> Includes the ObjectEvent with <b>tl:takeProductSampleEventExtensions</b> .                                                                                                                                                                                                                                                                                                                                                                                 |
| choice%1            |  |  |  |  | 1...<br>*        | -        | <b>Required.</b> Choice element. Only the ObjectEvent is present.                                                                                                                                                                                                                                                                                                                                                                                                           |
| ObjectEvent         |  |  |  |  | 1...<br>*        | -        | <b>Required.</b> ObjectEvent is the only choice within choice%1. Indicates a take product sample event when all of the following is true: <ul style="list-style-type: none"> <li>• action = <b>OBSERVE</b></li> <li>• bizStep = <a href="https://epcis.tracelink.com/bizStep/sampling">https://epcis.tracelink.com/bizStep/sampling</a></li> <li>• disposition = <a href="https://epcis.tracelink.com/disp/sampled">https://epcis.tracelink.com/disp/sampled</a></li> </ul> |
| eventTime           |  |  |  |  | 1...1<br>1/*     | DateTime | <b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the Z to be appended if it is not included; however, the system assumes that the time is GMT and therefore appends the Z. <sup>1</sup>                                                                                             |
| eventTimeZoneOffset |  |  |  |  | 1...1<br>1/*     | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with the choice made for eventTime, per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                                                  |
| epcList             |  |  |  |  | 1...1<br>-       | -        | <b>Required.</b> List of the EPCs of the topmost commissioned containers (e.g. pallets, cases).                                                                                                                                                                                                                                                                                                                                                                             |
| epc                 |  |  |  |  | 0...<br>*<br>0/* | String   | <b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format. <sup>3</sup><br>See the <a href="#">EPCPureIdentifierFormat</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                     |
| action              |  |  |  |  | 1...1<br>0/*     | String   | <b>Required.</b> The <b>action</b> type of the event. The <b>action</b> value must equal <b>OBSERVE</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup>2019-03-31T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:088202.5503022.100000000670

urn:epc:id:sscc:088202.002000000034

<http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943><http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000000><sup>4</sup>OBSERVE

| Data Element |  |  |  |                                     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|-------------------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizStep                             | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value must equal <a href="http://epcis.tracelink.com/bizstep/sampling">http://epcis.tracelink.com/bizstep/sampling</a> . <sup>1</sup>                                                                                                                                                                                       |
|              |  |  |  | disposition                         | 0...1<br>0/*  | AnyURI | <b>Required.</b> The status of the message. The <b>disposition</b> value must equal <a href="http://epcis.tracelink.com/disp/sampled">http://epcis.tracelink.com/disp/sampled</a> . <sup>2</sup>                                                                                                                                                                                                      |
|              |  |  |  | readPoint                           | 0...1<br>-    | -      | The location where the event occurs.                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | id                                  | 1...1<br>0/*  | AnyURI | The SGLN EPC pure identifier of the location where the event occurs. <sup>3</sup>                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | bizLocation                         | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | id                                  | 1...1<br>1/*  | AnyURI | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | bizTransactionList                  | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:locationId                       | 0...1<br>0/*  | String | Serialized Operations Manager external partner location identifier. When an external Serialized Operations Manager partner submits a message, TraceLink uses the subscriber company integration user to perform the action and log this in the audit trail. This causes all messages executed by the external Serialized Operations Manager subscriber to be attributed to that company. <sup>4</sup> |
|              |  |  |  | @type                               | 0...1<br>0/*  | String | Attribute identifying the location type. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. <sup>5</sup>                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:takeProductSampleEventExtensions | 0...1<br>-    | -      | Take product sample event extensions group.                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:takeSampleReasonCode             | 0...1<br>0/*  | String | <b>Required.</b> if <b>tl:InspectionCountryCode</b> = <b>RU</b> . Reason identifying why a serial number status was updated. <sup>6</sup> See the <a href="#">TakeSampleReasonCode</a> enumeration list for valid values.                                                                                                                                                                             |

<sup>1</sup><http://epcis.tracelink.com/bizstep/sampling><sup>2</sup><http://epcis.tracelink.com/disp/sampled><sup>3</sup>urn:epc:id:sgln:7777776.67345.0<sup>4</sup>8888882028677<sup>5</sup>GLN<sup>6</sup>QUALITY\_CONTROL

| Data Element |  |  |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                |
|--------------|--|--|--|--|--------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:reasonDescription     | 0...1<br>0/*  | String | Text description of the reason for the status update. <sup>1</sup>                                                                                                                                                                         |
|              |  |  |  |  | tl:inspectionCountryCode | 0...1<br>0/*  | String | The country where the inspection is being performed using the standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>2</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  | tl:samplingPartyId       | 0...1<br>0/*  | String | <b>Required.</b> if <b>tl:InspectionCountryCode</b> = <b>RU</b> . Business or location identifier for the entity performing the sampling. <sup>3</sup>                                                                                     |
|              |  |  |  |  | @type                    | 1...1<br>1/*  | String | <b>Required.</b> Business or location type for the quality control entity identifier. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                     |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
  xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1" schemaVersion="1.2"
creationDate="2017-02-20T17:45:20Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8811891013778</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>201907251745200001</sbdh:InstanceIdentifier>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>Released by Quality

<sup>2</sup>US

<sup>3</sup>0882028677010

<sup>4</sup>GLN

```

        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-07-25T21:57:20Z</sbdh:CreationDateAndTime>
    </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <ObjectEvent>
            <eventTime>2019-07-25T21:57:20Z</eventTime>
            <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
            <epcList>
                <epc>urn:epc:id:sgtin:068202.0401034.11220207024596</epc>
            </epcList>
            <action>OBSERVE</action>
            <bizStep>http://epcis.tracelink.com/bizstep/sampling</bizStep>
            <disposition>http://epcis.tracelink.com/disp/sampled</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:9297187.01994.0</id>
            </readPoint>
            <bizLocation>
                <id/>
            </bizLocation>
            <tl:locationId type="GLN">8811891013778</tl:locationId>
            <tl:takeProductSampleEventExtensions>
                <tl:takeSampleReasonCode>SELECTIVE_CONTROL</tl:takeSampleReasonCode>
                <tl:reasonDescription>Released by Quality</tl:reasonDescription>
                <tl:inspectionCountryCode>US</tl:inspectionCountryCode>
                <tl:samplingPartyId type="GLN">8811891013778</tl:samplingPartyId>
            </tl:takeProductSampleEventExtensions>
        </ObjectEvent>
    </EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                        | Error Message                                                                                                          | Description                                                                                   |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Class 1</b>                                      |                                                                                                                        |                                                                                               |
| sbdh:Sender   sbdh:Identifier   <b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!                                                                      | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| sbdh:Receiver   sbdh:Identifier   <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!                                                                    | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| ObjectEvent                                         | Object event for take product sample is required !!!                                                                   | The error occurs if the source is empty or null.                                              |
| epc                                                 | Invalid EPC format !!!                                                                                                 | The error occurs if the source is invalid.                                                    |
| bizStep                                             | bizStep "http://epcis.tracelink.com/bizstep/sampling" is required for ObjectEvent take product sample !!!              | The error occurs if the source does not equal "http://epcis.tracelink.com/bizstep/sampling".  |
| disposition                                         | Disposition "http://epcis.tracelink.com/disp/sampled" is required for ObjectEvent take product sample !!!              | The error occurs if the source does not equal "http://epcis.tracelink.com/disp/sampled".      |
| readPoint   <b>id</b>                               | Valid readPoint identifier type is required !!!                                                                        | The error occurs if the source is invalid.                                                    |
| tl:takeSampleReasonCode                             | Valid take sample reason code required !!!                                                                             | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| tl:samplingPartyId   <b>@type</b>                   | Valid sampling party identifier type is required !!!                                                                   | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| <b>Class 2</b>                                      |                                                                                                                        |                                                                                               |
| epc                                                 | Serial Number <SerialNumber> does not exist.                                                                           | The error occurs if the source is empty or null.                                              |
|                                                     | Serial number <Serial Number> is not commissioned.                                                                     | The error occurs if the serial number status is not Commissioned.                             |
|                                                     | Serial number <Serial Number> is not associated with Location <Location Name>.                                         | The error occurs if the source is not associated with the correct tl:locationId.              |
|                                                     | Cannot update the status on serial number <Serial Number> with UOM <PackagingLevelUOM>. Serial numbers must be Eaches. | The error occurs if the source packaging level is not an each.                                |
|                                                     | Operation could not be performed because serial number <Serial Number> is not empty.                                   | The error occurs if the source packaging level is not set, but has child serial numbers.      |
| tl:takeSampleReasonCode                             | Reason Code is required for products sampled in Russia                                                                 | The error occurs if tl:inspectionCountryCode = "RU" but the source is empty or null.          |
| tl:samplingPartyId                                  | Field is not populated and Country of Inspection = RU ("Russia")                                                       | The error occurs if tl:inspectionCountryCode = "RU" but the source is                         |



| Data Element                                                                                                                                                      | Error Message | Description    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|
|                                                                                                                                                                   |               | empty or null. |
| Class 3                                                                                                                                                           |               |                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |               |                |

## Take Product Sample Event (EPCIS v1.2)

### Guidelines

#### Message Types:

- SOM\_TAKE\_SAMPLE\_EVENT
- SOM\_TAKE\_SAMPLE\_EVENT\_IB

#### Info Exchange Display Name: Take Product Sample

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element        | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                     |
|---------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                                                                                                                                                                                    |
| @schemaVersion      | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup>                                                                                                                                                                    |
| @creationDate       | 1...1<br>1/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <a href="#">Z</a> . <sup>2</sup> |

<sup>1</sup>1.2

<sup>2</sup>2017-05-19T22:08:02Z

| Data Element |             |                                     |                    |            | Occurs<br>Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-------------|-------------------------------------|--------------------|------------|------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | EPCISHeader |                                     |                    |            | 0...1<br>–       | -      | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |             | sbdh:StandardBusinessDocumentHeader |                    |            | 1...1<br>–       | -      | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |             |                                     | sbdh:HeaderVersion |            | 1...1<br>0/*     | String | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <b>1.0</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |             |                                     | sbdh:Sender        |            | 1...*<br>–       | -      | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |             |                                     | sbdh:Identifier    |            | 1...1<br>1/*     | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>2</sup></p> <p>SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sgln:088202.867701.0</code></li> <li>• <code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <div>  GLN will not have a urn/http prefix.         </div> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |             |                                     |                    | @Authority | 1...1<br>1/*     | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>3</sup></p> <p>See the <a href="#">MDPartyTypeEnum</a>s enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                               |
|              |             |                                     | sbdh:Receiver      |            | 1...*<br>–       | -      | <b>Required.</b> A unique identification key for the Receiver party of the message, representing the organization that created the standard business document. The Receiver element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |             |                                     | sbdh:Identifier    |            | 1...1<br>1/*     | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup></p> <p>SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p>                                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>1.0<sup>2</sup>1100001014507<sup>3</sup>GLN<sup>4</sup>0614141123452

| Data Element |  |  |                             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|-----------------------------|--------------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |                          |               |          | <ul style="list-style-type: none"> <li>• <a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li>• <a href="#">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <p> GLN will not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |                             | @Authority               | 1...1<br>1/*  | String   | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>1</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                           |
|              |  |  | sbdh:DocumentIdentification |                          | 1...1<br>-    | -        | <p><b>Required.</b> Contains the identification group for the message.</p>                                                                                                                                                                                                                                                                                                                        |
|              |  |  |                             | sbdh:Standard            | 1...1<br>0/*  | String   | <p><b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b>.<sup>2</sup></p>                                                                                                                                                                                                                                        |
|              |  |  |                             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <p><b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b>.<sup>3</sup></p>                                                                                                                                |
|              |  |  |                             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <p><b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others.<sup>4</sup></p>                                                                                                                                                     |
|              |  |  |                             | sbdh:Type                | 1...1<br>0/*  | String   | <p><b>Required.</b> This element identifies the type of the document. The Type value must be set to "Events".<sup>5</sup></p>                                                                                                                                                                                                                                                                     |
|              |  |  |                             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <p><b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b>.<sup>6</sup></p>                                                                                                |

<sup>1</sup>GLN<sup>2</sup>EPCglobal<sup>3</sup>1.0<sup>4</sup>201705191745200001<sup>5</sup>Events<sup>6</sup>2017-05-12T22:08:02Z

| Data Element        |  |  |  |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------|--|--|--|--|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPCISBody           |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EventList           |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Includes the ObjectEvent with <b>tl:takeProductSampleEventExtensions</b> .                                                                                                                                                                                                                                                                                                                                                                                                               |
| choice%1            |  |  |  |  | 1...*<br>-    | -        | <b>Required.</b> Choice element. Only the <b>ObjectEvent</b> is present.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ObjectEvent         |  |  |  |  | 1...*<br>-    | -        | <b>Required.</b> <b>ObjectEvent</b> is the only choice within <b>choice%1</b> . Indicates a take product sample event when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <b>OBSERVE</b></li> <li><b>bizStep</b> = <a href="https://epcis.tracelink.com/bizStep/sampling">https://epcis.tracelink.com/bizStep/sampling</a></li> <li><b>disposition</b> = <a href="https://epcis.tracelink.com/disp/sampled">https://epcis.tracelink.com/disp/sampled</a></li> </ul> |
| eventTime           |  |  |  |  | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the Z to be appended if it is not included; however, the system assumes that the time is GMT and therefore appends the Z. <sup>1</sup>                                                                                                                           |
| eventTimeZoneOffset |  |  |  |  | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                                                                   |
| epcList             |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of the topmost commissioned containers (e.g. pallets, cases).                                                                                                                                                                                                                                                                                                                                                                                                           |
| epc                 |  |  |  |  | 0...*<br>0/*  | String   | <b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format. <sup>3</sup> See the <a href="#">EPCPureIdentifierFormat</a> numeration list for valid values.                                                                                                                                                                                                                                                                                                                       |
| action              |  |  |  |  | 1...1<br>0/*  | String   | <b>Required.</b> The action type of the event. The <b>action</b> value must equal <b>OBSERVE</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>2019-03-31T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:088202.5503022.100000000670, urn:epc:id:sscc:088202.002000000034, <http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943>, <http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000000><sup>4</sup>OBSERVE

| Data Element |  |  |  |                                     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|-------------------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizStep                             | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value must equal <a href="http://epcis.tracelink.com/bizstep/sampling">http://epcis.tracelink.com/bizstep/sampling</a> . <sup>1</sup>                                                                                                                                                                                       |
|              |  |  |  | disposition                         | 0...1<br>0/*  | AnyURI | <b>Required.</b> The status of the message. The <b>disposition</b> value must equal <a href="http://epcis.tracelink.com/disp/sampled">http://epcis.tracelink.com/disp/sampled</a> . <sup>2</sup>                                                                                                                                                                                                      |
|              |  |  |  | readPoint                           | 0...1<br>–    | –      | The location where the event occurs.                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | id                                  | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC pure identifier of the location where the event occurs. <sup>3</sup> See the <a href="#">MDBusinessPartyTypeAttributes</a> enumeration list for valid values.                                                                                                                                                                                                           |
|              |  |  |  | bizLocation                         | 1...1<br>–    | –      | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | id                                  | 1...1<br>1/*  | AnyURI | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | bizTransactionList                  | 0...1<br>–    | –      | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:locationId                       | 0...1<br>0/*  | String | Serialized Operations Manager External partner location identifier. When an external Serialized Operations Manager partner submits a message, TraceLink uses the subscriber company integration user to perform the action and log this in the audit trail. This causes all messages executed by the external Serialized Operations Manager subscriber to be attributed to that company. <sup>4</sup> |
|              |  |  |  | @type                               | 0...1<br>0/*  | String | Attribute identifying the location type. <sup>5</sup> See the <a href="#">LocationIdType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:takeProductSampleEventExtensions | 0...1<br>–    | –      | Take product sample event extensions group.                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:takeSampleReasonCode             | 0...1<br>0/*  | String | <b>Required.</b> Reason identifying why a serial number status was updated. <sup>6</sup> See the <a href="#">TakeSampleReasonCode</a> enumeration list for valid values.                                                                                                                                                                                                                              |

<sup>1</sup><http://epcis.tracelink.com/bizstep/sampling><sup>2</sup><http://epcis.tracelink.com/disp/sampled><sup>3</sup>urn:epc:id:sgln:7777776.67345.0<sup>4</sup>8888882028677<sup>5</sup>GLN<sup>6</sup>QUALITY\_CONTROL

| Data Element |  |  |  |  |                          | Occurs<br>Length | Type   | Description                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--------------------------|------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:reasonDescription     | 0...1<br>0/*     | String | Text description of the reason for the status update. <sup>1</sup>                                                                                                                                                                          |
|              |  |  |  |  | tl:inspectionCountryCode | 0...1<br>0/*     | String | The country where the inspection is being performed using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>2</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  | tl:samplingPartyId       | 0...1<br>0/*     | String | <b>Required.</b> Business or location identifier for the entity performing the sampling. <sup>3</sup>                                                                                                                                       |
|              |  |  |  |  | @type                    | 1...1<br>1/*     | String | <b>Required.</b> Business or location type for the quality control entity identifier. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                      |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:tl="http://epcis.tracelink.com/ns"
  xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
  xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1" schemaVersion="1.2"
  creationDate="2017-02-20T17:45:20Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891024769</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>Released by Quality

<sup>2</sup>US

<sup>3</sup>0882028677010

<sup>4</sup>GLN

```

        <sbdh:InstanceIdentifier>2019120210090032</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-12-02T10:09:32Z</sbdh:CreationDateAndTime>
    </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <ObjectEvent>
            <eventTime>2019-12-02T10:09:32Z</eventTime>
            <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
            <epcList>
                <epc>urn:epc:id:sgtin:088202.5503022.100000000670</epc>
            </epcList>
            <action>OBSERVE</action>
            <bizStep>https://epcis.tracelink.com/bizStep/sampling</bizStep>
            <disposition>https://epcis.tracelink.com/disp/sampled</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:9997777.02449.0</id>
            </readPoint>
            <bizLocation>
                <id>urn:epc:id:sgln:9997777.02449.0</id>
            </bizLocation>
            <tl:locationId type="GLN">8888882028677</tl:locationId>
            <tl:takeProductSampleEventExtensions>
                <tl:takeSampleReasonCode>QUALITY_CONTROL</tl:takeSampleReasonCode>
                <tl:reasonDescription>Released by Quality</tl:reasonDescription>
                <tl:inspectionCountryCode>US</tl:inspectionCountryCode>
                <tl:samplingPartyId type="GLN">8888882028677</tl:samplingPartyId>
            </tl:takeProductSampleEventExtensions>
        </ObjectEvent>
    </EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                        | Error Message                                                                                           | Description                                                                                         | Inbound / Outbound |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------|
| Class 1                                             |                                                                                                         |                                                                                                     |                    |
| sbdh:Sender   <b>sbdh:Identifier</b>                | Source message sender is required !!!                                                                   | The error occurs if the source is empty or null.                                                    | OB                 |
| sbdh:Sender   sbdh:Identifier   <b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!                                                       | The error occurs if the source is invalid.                                                          | IB                 |
|                                                     | Partner type in source type attribute is required !!!                                                   | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | OB                 |
| sbdh:Receiver   <b>sbdh:Identifier</b>              | Source message receiver is required !!!                                                                 | The error occurs if the source is empty or null.                                                    | OB                 |
| sbdh:Receiver   sbdh:Identifier   <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!                                                     | The error occurs if the source is invalid.                                                          | IB                 |
|                                                     | Partner type in source type attribute is required !!!                                                   | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | OB                 |
| ObjectEvent                                         | Object event for take product sample is required !!!                                                    | The error occurs if the source is empty or null.                                                    |                    |
|                                                     | At least one take product sample event is required !!!                                                  | The error occurs if the source is empty or null.                                                    | OB                 |
| epc                                                 | Invalid EPC format !!!                                                                                  | The error occurs if the source is invalid.                                                          | IB                 |
|                                                     | Serial number is required !!!                                                                           | The error occurs if the source is empty or null.                                                    | OB                 |
|                                                     | Valid serial number format is required !!!                                                              | The error occurs if the source is invalid.                                                          | OB                 |
| bizStep                                             | bizStep http://epcis.tracelink.com/bizstep/sampling is required for ObjectEvent take product sample !!! | The error occurs if the source does not equal "http://epcis.tracelink.com/bizstep/sampling".        | IB                 |
| disposition                                         | Disposition http://epcis.tracelink.com/disp/sampled is required for ObjectEvent take product sample !!! | The error occurs if the source does not equal "http://epcis.tracelink.com/disp/sampled".            | IB                 |
| readPoint   <b>id</b>                               | Valid readPoint identifier type is required !!!                                                         | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | IB                 |
|                                                     | Valid event location identifier type is required !!!                                                    | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | OB                 |
| cmn:EventLocation                                   | Valid readPoint identifier type is required !!!                                                         | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | IB                 |
| tl:takeSampleReasonCode                             | Valid take sample reason code required !!!                                                              | The error occurs if the source is present, but there is no matching entry in the lookup file.       | IB/OB              |



| Data Element                                                                                                                                                      | Error Message                                        | Description                                                                                   | Inbound / Outbound |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------|
| tl:samplingPartyId   @type                                                                                                                                        | Valid sampling party identifier type is required !!! | The error occurs if the source is present, but there is no matching entry in the lookup file. | IB/OB              |
| Class 2                                                                                                                                                           |                                                      |                                                                                               |                    |
| -                                                                                                                                                                 | -                                                    | -                                                                                             | -                  |
| Class 3                                                                                                                                                           |                                                      |                                                                                               |                    |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                      |                                                                                               |                    |

## ESM Take Product Sample (EPCIS v1.2)

### Guidelines

**Message Type:** SOM\_ESM\_TAKE\_SAMPLE

**Info Exchange Display Name:** ESM Take Product Sample

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element        | Occurs Length | Format  | Description                                                                                                                 |
|---------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument | 1..1<br>-     | -       | <b>Required.</b> EPCIS message root element.                                                                                |
| @schemaVersion      | 1..1<br>0/*   | Decimal | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup> |

<sup>1</sup>1.2

| Data Element |  |  |                                     | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|-------------------------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | @creationDate                       | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | EPCISHeader                         | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | sbdh:StandardBusinessDocumentHeader | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | sbdh:HeaderVersion                  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <b>1.0</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | sbdh:Sender                         | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | sbdh:Identifier                     | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>3</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p> GLNs do not have an urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  | @Authority                          | 1...1<br>1/*  | String   | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>4</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                    |
|              |  |  | sbdh:Receiver                       | 1...*<br>-    | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                               |
|              |  |  | sbdh:Identifier                     | 1...1         | String   | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>2016-12-18T22:08:02Z<sup>2</sup>1.0<sup>3</sup>1100001014507<sup>4</sup>GLN<sup>5</sup>0614141123452

| Data Element |  |           |                             |                          | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|-----------|-----------------------------|--------------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |           |                             |                          |               |          | <p>Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLNs do not have an urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |           |                             | @Authority               | 1...1<br>1/*  | String   | <p><b>Required.</b> The receiver identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>1</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                           |
|              |  |           | sbdh:DocumentIdentification |                          | 1...1<br>—    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |           |                             | sbdh:Standard            | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                               |
|              |  |           |                             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b> . <sup>3</sup>                                                                                                                                                                                                                       |
|              |  |           |                             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>4</sup>                                                                                                                                                                                                                                             |
|              |  |           |                             | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> Identifies the document type. The <b>Type</b> value is set to <b>Events</b> for a shipment event. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                     |
|              |  |           |                             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> .                                                                                                                                                                                                    |
|              |  | EPCISBody |                             |                          | 1...1<br>—    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>GLN<sup>2</sup>EPCglobal<sup>3</sup>1.0<sup>4</sup>201609201745200001<sup>5</sup>Events

| Data Element |  |           |                     | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|-----------|---------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | EventList |                     | 1...1<br>-    | -        | <b>Required.</b> Includes the <b>ObjectEvent</b> with <b>tl:takeProductSampleEventExtensions</b> .                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |           | choice%1            | 1...*<br>-    | -        | <b>Required.</b> Choice element. Only the <b>ObjectEvent</b> is present.                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |           | ObjectEvent         | 1...*<br>-    | -        | <b>Required.</b> ObjectEvent is the only choice within <b>choice%1</b> . Indicates a take product sample event when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <b>OBSERVE</b></li> <li><b>bizStep</b> = <a href="https://epcis.tracelink.com/bizStep/sampling">https://epcis.tracelink.com/bizStep/sampling</a></li> <li><b>disposition</b> = <a href="https://epcis.tracelink.com/disp/sampled">https://epcis.tracelink.com/disp/sampled</a></li> </ul> |
|              |  |           | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the Z to be appended if it is not included; however, the system assumes that the time is GMT and therefore appends the Z. <sup>1</sup>                                                                                                                    |
|              |  |           | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for eventTime. A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time, whether it is standard time or Daylight saving time. Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                               |
|              |  |           | epcList             | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of the topmost commissioned containers (e.g. pallets, cases).                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |           | epc                 | 0...*<br>0/*  | String   | <b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format. <sup>3</sup><br>See the <a href="#">EPCPureIdentifierFormat</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                            |
|              |  |           | action              | 1...1<br>0/*  | String   | <b>Required.</b> The action type of the event. The S value must equal <b>OBSERVE</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>2019-03-31T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:088202.5503022.100000000670

urn:epc:id:sscc:088202.002000000034

<http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943><http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000000><sup>4</sup>OBSERVE

| Data Element |  |  |  |                                     | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|-------------------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizStep                             | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value must equal <a href="http://epcis.tracelink.com/bizstep/sampling">http://epcis.tracelink.com/bizstep/sampling</a> . <sup>1</sup>                                                                                                                                                                                       |
|              |  |  |  | disposition                         | 0...1<br>0/*  | AnyURI | <b>Required.</b> The status of the message. The <b>disposition</b> value must equal <a href="http://epcis.tracelink.com/disp/sampled">http://epcis.tracelink.com/disp/sampled</a> . <sup>2</sup>                                                                                                                                                                                                      |
|              |  |  |  | readPoint                           | 0...1<br>–    | –      | The location where the event occurs.                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | id                                  | 1...1<br>0/*  | AnyURI | The SGLN EPC pure identifier of the location where the event occurs. <sup>3</sup><br>See the <a href="#">MDBusinessPartyTypeAttributes</a> enumeration list for valid values.                                                                                                                                                                                                                         |
|              |  |  |  | bizLocation                         | 1...1<br>–    | –      | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | id                                  | 1...1<br>1/*  | AnyURI | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | bizTransactionList                  | 0...1<br>–    | –      | Not used.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | tl:locationId                       | 0...1<br>0/*  | String | Serialized Operations Manager External partner location identifier. When an external Serialized Operations Manager partner submits a message, TraceLink uses the subscriber company integration user to perform the action and log this in the audit trail. This causes all messages executed by the external Serialized Operations Manager subscriber to be attributed to that company. <sup>4</sup> |
|              |  |  |  | @type                               | 0...1<br>0/*  | String | Attribute identifying the location type. <sup>5</sup><br>See the <a href="#">LocationIdType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:takeProductSampleEventExtensions | 0...1<br>–    | –      | Take product sample event extensions group.                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:takeSampleReasonCode             | 0...1<br>0/*  | String | <b>Required.</b> Reason identifying why a serial number status was updated. <sup>6</sup><br>See the <a href="#">TakeSampleReasonCode</a> enumeration list for valid values.                                                                                                                                                                                                                           |

<sup>1</sup><http://epcis.tracelink.com/bizstep/sampling><sup>2</sup><http://epcis.tracelink.com/disp/sampled><sup>3</sup>urn:epc:id:sgln:7777776.67345.0<sup>4</sup>8888882028677<sup>5</sup>GLN<sup>6</sup>QUALITY\_CONTROL

| Data Element |  |  |  |  |                          | Occurs Length | Format | Description                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:reasonDescription     | 0...1<br>0/*  | String | Text description of the reason for the status update. <sup>1</sup>                                                                                                                                                                          |
|              |  |  |  |  | tl:inspectionCountryCode | 0...1<br>0/*  | String | The country where the inspection is being performed using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>2</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  | tl:samplingPartyId       | 0...1<br>0/*  | String | <b>Required.</b> Business or location identifier for the entity performing the sampling. <sup>3</sup>                                                                                                                                       |
|              |  |  |  |  | @type                    | 1...1<br>1/*  | String | <b>Required.</b> Business or location type for the quality control entity identifier. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                      |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
  xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1" schemaVersion="1.2"
creationDate="2017-02-20T17:45:20Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8811891013778</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>Released by Quality

<sup>2</sup>US

<sup>3</sup>0882028677010

<sup>4</sup>GLN

```

        <sbdh:InstanceIdentifier>201907251745200001</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-07-25T21:57:20Z</sbdh:CreationDateAndTime>
    </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <ObjectEvent>
            <eventTime>2019-07-25T21:57:20Z</eventTime>
            <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
            <epcList>
                <epc>urn:epc:id:sgtin:068202.0401034.11220207024596</epc>
            </epcList>
            <action>OBSERVE</action>
            <bizStep>http://epcis.tracelink.com/bizstep/sampling</bizStep>
            <disposition>http://epcis.tracelink.com/disp/sampled</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:9297187.01994.0</id>
            </readPoint>
            <bizLocation>
                <id/>
            </bizLocation>
            <tl:locationId type="GLN">8811891013778</tl:locationId>
            <tl:takeProductSampleEventExtensions>
                <tl:takeSampleReasonCode>SELECTIVE_CONTROL</tl:takeSampleReasonCode>
                <tl:reasonDescription>Released by Quality</tl:reasonDescription>
                <tl:inspectionCountryCode>US</tl:inspectionCountryCode>
                <tl:samplingPartyId type="GLN">8811891013778</tl:samplingPartyId>
            </tl:takeProductSampleEventExtensions>
        </ObjectEvent>
    </EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                 | Error Message                                                                                                          | Description                                                                                          |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Class 1                                      |                                                                                                                        |                                                                                                      |
| sbdh:Sender   sbdh:Identifier   @Authority   | Valid Sender/Identifier Authority is required !!!                                                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.        |
| sbdh:Receiver   sbdh:Identifier   @Authority | Valid Receiver/Identifier Authority is required !!!                                                                    | The error occurs if the source is present, but there is no matching entry in the lookup file.        |
| ObjectEvent                                  | Object event for take product sample is required !!!                                                                   | The error occurs if the source is empty or null.                                                     |
| epc                                          | Invalid EPC format !!!                                                                                                 | The error occurs if the source is invalid.                                                           |
| bizStep                                      | bizStep "http://epcis.tracelink.com/bizstep/sampling" is required for ObjectEvent take product sample !!!              | The error occurs if the source does not equal "http://epcis.tracelink.com/bizstep/sampling".         |
| disposition                                  | Disposition "http://epcis.tracelink.com/disp/sampled" is required for ObjectEvent take product sample !!!              | The error occurs if the source does not equal "http://epcis.tracelink.com/disp/sampled".             |
| readPoint   id                               | Valid readPoint identifier type is required !!!                                                                        | The error occurs if the source is invalid.                                                           |
| tl:takeSampleReasonCode                      | Valid take sample reason code required !!!                                                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.        |
| tl:samplingPartyId   @type                   | Valid sampling party identifier type is required !!!                                                                   | <b>The error occurs if the source is present, but there is no matching entry in the lookup file.</b> |
| Class 2                                      |                                                                                                                        |                                                                                                      |
| epc                                          | Serial Number <SerialNumber> does not exist.                                                                           | The error occurs if the source is empty or null.                                                     |
|                                              | Serial number <Serial Number> is not commissioned.                                                                     | The error occurs if the serial number status is not Commissioned.                                    |
|                                              | Serial number <Serial Number> is not associated with Location <Location Name>.                                         | The error occurs if the source is not associated with the correct tl:locationId.                     |
|                                              | Cannot update the status on serial number <Serial Number> with UOM <PackagingLevelUOM>. Serial numbers must be Eaches. | The error occurs if the EPC packaging level being sampled is not an each.                            |
|                                              | Operation could not be performed because serial number <Serial Number> is not empty.                                   | The error occurs if the EPC has child EPCs.                                                          |
| tl:takeSampleReasonCode                      | Reason Code is required for products sampled in Russia                                                                 | The error occurs if tl:inspectionCountryCode = "RU" but the source is empty or null.                 |
| tl:SamplingPartyId                           | Field is not populated and Country of Inspection = RU ("Russia")                                                       | The error occurs if tl:inspectionCountryCode = "RU" but the source is                                |



| Data Element                                                                                                                                                      | Error Message | Description    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|
|                                                                                                                                                                   |               | empty or null. |
| Class 3                                                                                                                                                           |               |                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |               |                |

## Take Product Sample (SOAP)

### Take Product Sample Request

#### Guidelines

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

The following data is sent in the request to TraceLink:

| Data Element     | Occurs Length | Type | Description                                                                                            |
|------------------|---------------|------|--------------------------------------------------------------------------------------------------------|
| soapenv:Envelope | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element.                                                           |
| soapenv:Header   | 1...1<br>-    | -    | <b>Required.</b> Not used.                                                                             |
| soapenv:Body     | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Body.                                                                    |
| urn:TakeSample   | 1...1<br>-    | -    | <b>Required.</b> Request message that sets a <b>Sampled</b> attribute for all provided serial numbers. |
| SampleRequest    | 0...1<br>-    | -    | <b>Required.</b> SampleRequest request message.                                                        |

| Data Element |  |  |  |                       | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|-----------------------|----------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | Items                 | 1...1<br>-     | -      | <b>Required.</b> List of serial numbers (repeating element).                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | @sn                   | 1...*<br>1/*   | String | <b>Required.</b> Serial number that is being sampled. See <a href="#">Serial Number Data Examples</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | @namespace            | 0...1<br>1/*   | String | Not supported by TraceLink.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | EventDateTime         | 0...1<br>-     | Date   | The time of the Take Sample event in XSD GMT date format. If omitted, the system records the current date and time. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | Location              | 0...1<br>1/*   | String | Site level SGLN of the location where the event occurred. SGLN format will be numeric component only, with urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events). If it is not specified and the API credentials used in the call are specific to a company location, TraceLink will attempt to default the <b>Location</b> based upon the corresponding Company Location master data entry. <sup>3</sup> |
|              |  |  |  | LocationType          | 0...1<br>1/*   | String | The type of the Location identifier. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | ReasonDescription     | 0...1<br>1/100 | String | An explanation for why the serial number is being sampled. If <b>ReasonDescription</b> is longer than 100 characters, only the first 100 characters will be stored. <sup>5</sup>                                                                                                                                                                                                                                                                                          |
|              |  |  |  | TakeSampleReasonCode  | 0...1<br>1/*   | String | <b>Required.</b> Reason code identifying why serial number is being sampled. See the <a href="#">TakeSampleReasonCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | InspectionCountryCode | 0...1<br>1/*   | String | <b>Required.</b> The country where the inspection is being performed using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                                                                                                                                                              |
|              |  |  |  | SamplingPartyID       | 0...1<br>-     |        | <b>Required.</b> Business or location identifier for the entity performing the sampling.                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | @identifiervalue      | 1...1<br>1/*   | String | <b>Required.</b> Value of the identifier.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | @identifiertype       | 1...1<br>1/*   | String | <b>Required.</b> Type of the identifier value. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>0100882025030220216370871<sup>2</sup>2015-06-01T17:10:16<sup>3</sup>8888882.02867.0<sup>4</sup>GLN<sup>5</sup>Sample of product given to on-site client

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:TakeSample>
      <SampleRequest>
        <Items>
          <Item sn="0100882025030220216370871" namespace="?"/>
        </Items>
        <EventDateTime>2015-06-01T17:10:16</EventDateTime>
        <Location>8888882.02867.0</Location>
        <ReasonDescription>Sample of product given to on-site client</ReasonDescription>
      </SampleRequest>
    </urn:TakeSample>
  </soapenv:Body>
</soapenv:Envelope>
```

## Errors

| Exception Code           | Exception Message                                                                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BADITEMSTATE             | Cannot perform operation on serial number <serial number> with item state <item state>. This operation can only be performed when the serial number is <item state>.                                       |
| BADSTATETRANSITION       | Cannot perform operation on serial number <serial number> to change item state/serial number state from <serial number state> to <serial number state>. The allowed new states are <serial number states>. |
| EVENTTIMEAFTERNOW        | Event time stamp must not be in the future.                                                                                                                                                                |
| EVENTTIMEBEFORELASTEVENT | Event time stamp is earlier than the last event for serial number <serial number>.                                                                                                                         |
| INTERNALERROR            | SerialNumberState for <serial number> is null.                                                                                                                                                             |
| INTERNALERROR            | Internal error from server: <server information>.                                                                                                                                                          |
| INTERNALERROR            | ItemStateTransitions.properties did not load correctly.                                                                                                                                                    |
| INTERNALERROR            | SerialNumberStateTransitions.properties did not load correctly.                                                                                                                                            |
| NOTCOMMISSIONED          | Serial number <serial number> is not commissioned.                                                                                                                                                         |

| Exception Code   | Exception Message                                                                                                                                           |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTEACH          | Cannot perform operation on serial number <serial number> with UOM <unit of measurement>. The operation can only be performed on unit level serial numbers. |
| NOTEMPTY         | Operation could not be performed because serial number <serial number> is not empty.                                                                        |
| NOTVALIDLOCATION | Location <location identifier> was not valid for serial number <serial number>.                                                                             |
| SNNOTFOUND       | Serial number <serial number> does not exist.                                                                                                               |
| VALIDATION       | Reason Code is required for products sampled in Russia.                                                                                                     |
| VALIDATION       | Sample Party is required for products sampled in Russia.                                                                                                    |

## Take Product Sample Response

### Guidelines

The following data is included in the message response:

| Data Element           | Occurs Length | Type | Description                                                                                                                            |
|------------------------|---------------|------|----------------------------------------------------------------------------------------------------------------------------------------|
| S:Envelope             | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element.                                                                                           |
| S:Body                 | 1...1<br>-    | -    | <b>Required.</b> SOAP Message Body.                                                                                                    |
| ns2:TakeSampleResponse | 1...1<br>-    | -    | <b>Required.</b> TakeSample response message.                                                                                          |
| TLResponse             | 0...1<br>-    | -    | <b>Required.</b> TraceLink response.                                                                                                   |
| Success                | 0...1<br>-    | -    | <b>Required.</b> Indicates if the request successfully processed. <sup>1</sup>                                                         |
| ExceptionReturn        | 0...1<br>-    | -    | <b>Conditionally required</b> if <b>Success = false</b> . Populated with error information only if Success = false, otherwise omitted. |

<sup>1</sup>true

| Data Element |  |  |  |  |                  | Occurs Length | Type   | Description                                                                                                                                                 |
|--------------|--|--|--|--|------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | CallException    | 1...*<br>-    | -      | <b>Required.</b> Contains error details.                                                                                                                    |
|              |  |  |  |  | ExceptionCode    | 0...1<br>0/*  | String | <b>Required.</b> Error code for exception.                                                                                                                  |
|              |  |  |  |  | ExceptionMessage | 0...1<br>0/*  | String | <b>Conditionally required</b> if further description of the error condition is available. Message that further describes the error condition, if available. |

## Example

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:TakeSampleResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns2:TakeSampleResponse>
  </S:Body>
</S:Envelope>
```



# Shipment





# Send shipment APIs

## Why do I use these messages?

Use the following messages to create outbound deliveries for items being shipped. A shipment message captures details of the business transaction, including which products are being shipped, where they are being shipped to, and why they are being shipped.

## Which reports do these messages generate?

These messages generate one of the following reports in the Russia Compliance application if their contents meet the report conditions:

- [381 - Move Owner](#) – Captures the transfer of items manufactured by a CMO to the MAH after the items have been part of a product release.
- [331 - Foreign Shipment](#) – Captures information about serialized items that are shipped to Russia for import as a non-consignment direct order.
- [334 - Custom Move](#) – Captures the transfer of serialized items between customs zones as the items are being imported to Russia.
- [431 - Move Place](#) – Captures the transfer of serialized items between warehouses in Russia.
- [415 - Move Order](#) – Captures information about serialized items that are shipped in Russia as a sale to a *registered* buyer (i.e. the **Ship To Location** has a 14-digit Russia Account Number in Partner Master Data) or as a return to a seller.
- [441 - Move Unregistered Order](#) – Captures information about serialized items that are shipped as a sale to an *unregistered* buyer in Russia (i.e. the **Ship to Location** does *not* have a 14-digit Russia Account Number and the **To Business** has a 36-digit Russia Account Number or is identified by a Russia INN or KPP in Partner Master Data).
- [541 - Move Destruction](#) – Captures the transfer of serialized items to a destruction facility in Russia.

## Sales Shipment (XML)

### Guidelines

Use this message when shipping product as a sale (i.e. the shipment is not a transfer or return).

This message allows shipment data to be sent in two parts (i.e. shipment information and serial numbers). For example, shipment information can originate from an ERP system and serial numbers from WMS system or 3PL partner.





- When product changes ownership from an MAH, or a CMO or 3PL acting on behalf of an MAH, to another entity, an outbound shipment is generated and the serial numbers are put into a **shipped** state.
- When product is moving between locations (i.e. not a change of ownership) working on behalf of an MAH, an inbound shipment is generated and the serial numbers are put into a **pending receipt** state.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 4 hours.

**Message Type:** SOM\_SALES\_SHIPMENT

**Info Exchange Display Name:** Sales Shipment

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ Elements in the table below that offer lookup functionality through certain identifiers are applicable to *TraceLink Customers only*.

| Data Element            |                       |                        | Occurs Length | Type   | Description                                                                   |
|-------------------------|-----------------------|------------------------|---------------|--------|-------------------------------------------------------------------------------|
| SOMSalesShipmentMessage |                       |                        | 1..1<br>-     | -      | <b>Required.</b> Root element of message.                                     |
|                         | som:ControlFileHeader |                        | 1..1<br>-     | -      | <b>Required.</b> The message document's header information.                   |
|                         |                       | cmn:FileSenderNumber   | 1..1<br>1/20  | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup>    |
|                         |                       | cmn:FileReceiverNumber | 1..1<br>1/20  | String | <b>Required.</b> The company identifier of the file's recipient. <sup>2</sup> |

<sup>1</sup>8888882028655

<sup>2</sup>8888882028677

| Data Element |                          |  | Occurs Length  | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--------------------------|--|----------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | cmn:FileControlNumber    |  | 1...1<br>1/20  | String   | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>1</sup>                                                                                                                                                                                                                                                              |
|              | cmn:FileDate             |  | 1...1<br>10/10 | Date     | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>2</sup>                                                                                                                                                                                                                                                                            |
|              | cmn:FileTime             |  | 1...1<br>9/9   | Time     | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>3</sup>                                                                                                                                                      |
|              | som:MessageBody          |  | 1...1<br>-     | -        | <b>Required.</b> The Message Body includes all of the Serialized Operations Manager Sales Shipment message details including, but not restricted to, location, delivery, and order information.                                                                                                                                                                                                 |
|              | cmn:LocationId           |  | 0...1<br>0/34  | String   | The LocationId field specifies the identifier of the facility/warehouse so as to scope the Shipment status update for the serial numbers only at the specified location. <sup>4</sup><br>If the location is omitted, the Shipment status update will be applied globally to all matching serial numbers in the system.                                                                          |
|              | cmn:EventDateTime        |  | 0...1<br>0/*   | DateTime | Timestamp of the date/time of the shipment event with the UTC time zone indicator in format: YYYY-MM-DDTHH:MM:SS.ssZ.<br><div> If not present, the system defaults to the current GMT date/time.</div>                                                                                                       |
|              | cmn:DeliveryNumber       |  | 1...1<br>1/*   | String   | <b>Required.</b> Indicates the DeliveryNumber that links the order information to the serialized pick information for this customer delivery. <sup>5</sup><br><b>cmn:DeliveryNumber</b> must be unique for across all shipments.                                                                                                                                                                |
|              | cmn:DeliveryCompleteFlag |  | 1...1<br>1/*   | Boolean  | <b>Required.</b> TraceLink allows communication of the data all in one message, or deliver the information incrementally over a period of time. If sending the data all at once, set flag to true. If sending data incrementally, set flag to false. <sup>6</sup><br>Values must be lowercase or an error results.<br>When set to true, <b>cmn:DeliveryCompleteFlag</b> instructs TraceLink to: |

<sup>1</sup>20130821063132<sup>2</sup>2013-08-21<sup>3</sup>06:31:32Z<sup>4</sup>8888882028655<sup>5</sup>4520010<sup>6</sup>true

| Data Element |  |                            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|----------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                            |               |         | <ol style="list-style-type: none"> <li>1. Process an outbound delivery.</li> <li>2. Update the status of all serial numbers and sub-child aggregations to be shipped.</li> <li>3. Trigger generation of regulatory reporting messages based on customer configuration.</li> </ol> <p>If only partial information is provided in the message (e.g. order detail only, serial numbers only) and the DeliveryCompleteFlag is set to true, the park/retry function returns the message to the queue for period reprocessing for up to two hours and updates the message with any previously omitted details when they become available. This enables an ERP system to send Order Details while the warehouse system sends the serial numbers separately, allowing the order in which this information is received to be arbitrary.</p> |
|              |  | som:OrderDetails           | 0...1<br>-    | -       | Can be communicated at any time (e.g. before or after the picked serial numbers have been communicated).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  | cmn:DisaggregateFromParent | 0...1<br>0/*  | Boolean | When set to <b>true</b> instructs the system to disaggregate the picked serial number from the parent container, if it is aggregated. If not set, or set to <b>false</b> , the system will operate in default mode which is to generate an error if attempting to pick serial number for an item or container that is aggregated to a parent container. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  | cmn:CorrectiveShipment     | 0...1<br>0/*  | Boolean | <p>Default value is <b>false</b>, which indicates that it is not a corrective shipment.</p> <p> If <b>true</b>, indicates that a new Serialized Operations Manager shipment is correcting a previously voided Serialized Operations Manager shipment message. The corrected message must be voided before the new shipment.</p>                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  | cmn:OriginalDeliveryNumber | 0...1<br>0/*  | String  | If the corrective delivery is using a new delivery number, provide original delivery number for cross-reference purposes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  | cmn:EntryPort              | 0...1<br>0/*  | String  | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  | cmn:ExitPort               | 0...1<br>0/*  | String  | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  | cmn:TransactionIdentifier  | 0...*<br>0/*  | String  | The transaction identifier is associated with the picked serial numbers for regulatory reporting purposes. At least one transaction id is required. The transaction identifier type uses specific enumeration values. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>false<sup>2</sup>PO303005 or D70301

| Data Element |  |  |                     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|---------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |        | <p> Country Requirements:</p> <ul style="list-style-type: none"> <li>• Argentina: provide Packing Slip Number.</li> <li>• China: provide Sales Order Number.</li> <li>• US: provide PO Number, ASN Number, and Invoice Number if available.</li> </ul>                                                                                                                                                                                                                                                   |
|              |  |  | @type               | 1...1<br>1/*  | String | <p><b>Required.</b> The transaction identifier type. Valid values:</p> <ul style="list-style-type: none"> <li>• <a href="#">ASN</a></li> <li>• <a href="#">BOL</a></li> <li>• <a href="#">DESTRUCTION</a></li> <li>• <a href="#">EWAY</a></li> <li>• <a href="#">INVOICE</a></li> <li>• <a href="#">NOTAFISCALELETRONICA</a></li> <li>• <a href="#">OTHER</a></li> <li>• <a href="#">PACKSLIP</a></li> <li>• <a href="#">PO</a></li> <li>• <a href="#">PRONUMBER</a></li> <li>• <a href="#">RETURN</a></li> <li>• <a href="#">SALESORDER</a></li> <li>• <a href="#">TRANSFER</a></li> </ul> |
|              |  |  | @date               | 0...1<br>0/*  | Date   | <b>Required.</b> The transaction identifier date. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | cmn:TransactionDate | 1...1<br>1/*  | Date   | <p><b>Required.</b> Indicates the date when the transfer of ownership occurred between the FromBusinessParty and ToBusinessParty. The date of the message in XML YYYY-MM-DD format.<sup>2</sup></p> <p> Date/times in Serialized Operations Manager must be in GMT.</p>                                                                                                                                                                                                                                |

<sup>1</sup>2019-03-30<sup>2</sup>2013-08-21

| Data Element |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|---------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:TransactionTime       | 0...1<br>0/*  | Time    | The time of the transaction in XML HH:MM:SSZ format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | cmn:ShipToCountryCode     | 1...1<br>2/2  | String  | <b>Required.</b> Two-letter ISO country code for ship-to country. This value will be referenced to advise regulatory reporting if it is required for the specified country market. Setting this value alone does not trigger regulatory reporting. The actual trigger for regulatory reporting is governed by customer administrative configuration in TraceLink. <sup>2</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                         |
|              |  |  | cmn:ShipFromCountryCode   | 0...1<br>2/2  | String  | <b>Conditionally required</b> if <b>cmn:SalesDistributionType</b> = <b>EXPORTSALE</b> , <b>EXPORTTRANSFER</b> , or <b>EXPORTRETURN</b> . ISO country code for the ship-from country. Provides TraceLink with the information needed to trigger regulatory reporting in response to relevant events.<br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                                                                                    |
|              |  |  | cmn:SalesDistributionType | 1...1<br>1/*  | String  | <b>Required.</b> This value is referenced to advise the application of sale (change of ownership of the product) and transfer (no change of ownership of product, but physical movement of product) for application and regulatory reporting purposes.<br>Setting this value alone does not trigger regulatory reporting. The actual triggering of regulatory reporting is governed by customer administrative configuration in TraceLink. <sup>3</sup><br>See the <a href="#">SalesDistType</a> enumeration list for valid values. |
|              |  |  | cmn:SupplyType            | 0...1<br>0/*  | String  | Identifies the type of supply that is being performed.<br>See the <a href="#">SupplyType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | cmn:ContractType          | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>cmn:ShipFromCountryCode</b> = <b>KR</b> and <b>cmn:SalesDistributionType</b> = <b>EXPORTSALE</b> or <b>INCOUNTRYSALE</b> . Identifies if a private or competitive bid contract is used for the sale of goods.<br>See the <a href="#">ContractType</a> enumeration list for valid values.                                                                                                                                                                                                        |
|              |  |  | cmn:Comments              | 0...1<br>0/*  | String  | Optional field that includes comments (up to 200 characters) associated with the delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | cmn:DropShipment          | 0...1<br>0/*  | Boolean | If set to <b>true</b> , this value indicates that a shipment is a drop shipment. A drop shipment occurs when there is a delivery of product from a manufacturer or original supplier direct to the end customer, without passing through the wholesale distributor who processed the sale. <sup>4</sup>                                                                                                                                                                                                                             |

<sup>1</sup>02:30:55Z<sup>2</sup>US<sup>3</sup>INCOUNTRYSALE<sup>4</sup>false

| Data Element |  |  |                                 | Occurs Length  | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|---------------------------------|----------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:ContractNumber              | 0...1<br>0/*   | String  | Identification number of the contract. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | cmn:FundingSource               | 0...1<br>0/*   | String  | <b>Required.</b> Source of the funding. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | cmn:DeliveryInspection          | 0...1<br>0/*   | String  | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                                                                                                                                                        |
|              |  |  | cmn:DeliveryInspectionDate      | 0...1<br>10/10 | Date    | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                         |
|              |  |  | cmn:DeliveryInspectionNote      | 0...1<br>0/*   | String  | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | cmn:RemovalFromCirculation      | 0...1<br>0/*   | String  | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                                                                                                                                                  |
|              |  |  | cmn:AggregationInspection       | 0...1<br>0/*   | String  | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                                                                                                                                                   |
|              |  |  | cmn:OrderItemList               | 0...1<br>-     | -       | Populate the <b>cmn:OrderItemList</b> group to communicate the expected pick quantities for products at the EACH (unit) level. This information is used in verification of the actual serial number picked to verify the correct product, correct lot number (if provided), and correct quantity.<br><b>cmn:OrderItemList</b> can include serialized and not serialized products that are subject to compliance reporting. |
|              |  |  | cmn:AllowShortVerificationCount | 0...1<br>0/*   | Boolean | Instructs the system whether to allow short picks when verifying the quantities of what is expected to be picked (in <b>cmn:OrderItemList</b> ) against the each quantities of actual scanned serial numbers (in <b>cmn:AddedPickedItems</b> ). <sup>4</sup><br>Values must be lower case only. If no value is specified, <b>false</b> is assumed.                                                                         |
|              |  |  | cmn:OrderItem                   | 1...*<br>-     | -       | <b>Required.</b> The <b>cmn:OrderItem</b> group is a repeating element that captures the item code, lot number, and quantity for each item that will be picked for that order. Each unique item code and lot number are communicated in a separate order item group.<br>Either <b>cmn:InternalMaterialCode</b> or <b>cmn:PackagingItemCode</b> is mandatory with <b>cmn:Quantity</b> .                                     |

<sup>1</sup>1234567<sup>2</sup>FederalBudgetFunds<sup>3</sup>2021-12-21<sup>4</sup>true

| Data Element |  |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--|--------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:OrderItemNumber      | 0...1<br>0/*  | String  | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                                                                                                                       |
|              |  |  |  |  | Choice                   | 1...1<br>-    | Choice  | <b>Required.</b> A choice between the <b>cmn:InternalMaterialCode</b> and <b>cmn:PackingItemCode</b> for <b>cmn:OrderItem</b> is required for this message. Cannot use both or none.                                                                                                                                                                                                              |
|              |  |  |  |  | cmn:InternalMaterialCode | 0...1<br>1/*  | String  | <b>Conditionally required</b> if <b>cmn:PackingItemCode</b> is not populated. Option 1 for OrderItem. Used to identify the product using the internal material number, which is configured in the Product Master Data, and associated with serial number at time of commissioning. <sup>1</sup>                                                                                                   |
|              |  |  |  |  | cmn:PackingItemCode      | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>cmn:InternalMaterialCode</b> is not populated. This is Option 2 for the OrderItem message. Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data, and associated with serial number at time of commissioning. <sup>2</sup>                                                                         |
|              |  |  |  |  | @type                    | 0...1<br>1/*  | String  | <b>Required.</b> The packaging item code type. See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | cmn:LotNumber            | 0...1<br>0/*  | String  | The lot or batch code for the items to be picked (if available). <sup>3</sup>                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:ExpirationDate       | 0...1<br>0/*  | Date    | Expiration date for the product in XML date format YYYY-MM-DD. <sup>4</sup>                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:Quantity             | 1...1<br>1/*  | Integer | <b>Required.</b> The quantity of items at the EACH (unit) level of the item. Quantity must be greater than zero if <b>cmn:IsSerialized = false</b> . If multiple GTINs at the same packaging level are associated with the same internal material code, the system automatically combines quantities from those GTINs and provides a single quantity for the Internal Material Code. <sup>5</sup> |
|              |  |  |  |  | cmn:UnitPrice            | 0...1<br>1/*  | Decimal | <b>Required.</b><br>The unit price of an item.                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>6</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                                                                                                                                             |

<sup>1</sup>100253<sup>2</sup>00882026030229<sup>3</sup>B234567<sup>4</sup>2018-08-15<sup>5</sup>48<sup>6</sup>USD

| Data Element |  |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|---------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:VAT                   | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>1</sup>                                                                                                                                                                                                                                        |
|              |  |  |  |  | @currencyCode             | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>2</sup> See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                            |
|              |  |  |  |  | cmn:GrossPrice            | 0...1<br>0/*  | Decimal | Price including unit price and all taxes and fees. <sup>3</sup>                                                                                                                                                                                                               |
|              |  |  |  |  | @currencyCode             | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>4</sup> See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                            |
|              |  |  |  |  | cmn:IsSerialized          | 0...1<br>0/*  | Boolean | <b>Conditionally required</b> if <b>cmn:shipFromCountryCode</b> = <b>KR</b> and <b>cmn:SalesDistributionType</b> = <b>EXPORTSALE</b> or <b>INCOUNTRYSALE</b> for non-serialized products. Indicates if the item is not serialized. If omitted, defaults the value to "true".  |
|              |  |  |  |  | cmn:TransactionIdentifier | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>5</sup>                                                                                                                                                  |
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li>• <b>DESTRUCTION</b></li> <li>• <b>INVOICE</b></li> <li>• <b>NOTAFISCALELETRONICA</b></li> <li>• <b>OTHER</b></li> <li>• <b>PO</b></li> <li>• <b>RETURN</b></li> </ul> |
|              |  |  |  |  | @date                     | 0...1<br>0/*  | Date    | <b>Required.</b> <b>Conditionally required</b> if <b>cmn:ShipToCountryCode</b> = <b>RU</b> . The transaction identifier date. <sup>6</sup>                                                                                                                                    |
|              |  |  |  |  | cmn:SenderInfo            | 0...1         | -       | <b>Required.</b>                                                                                                                                                                                                                                                              |

<sup>1</sup>152.22<sup>2</sup>USD<sup>3</sup>45.67<sup>4</sup>USD<sup>5</sup>PO303005<sup>6</sup>2019-03-30



| Data Element |  |  |                               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|-------------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                               |               |        | This message contains information about the supply chain partner that is sending the return shipment. The <b>cmn:FromBusinessParty</b> and <b>cmn:ShipFromLocation</b> elements determine whether to use master data lookup to populate the address, license, and contact elements. Only one of <b>cmn:FromBusinessParty</b> or <b>cmn:ShipFromLocation</b> elements may be present at once.                                                                                                                                                                                                            |
|              |  |  | choice%1                      | 0...1<br>-    | Choice | Option 1 within choice%1 of cmn:SenderInfo contains only the <b>cmn:FromBusinessPartyLookupId</b> (in this case, TraceLink populate all of the <b>cmn:FromBusinessPartyInfo</b> field data based on company master data lookup). Populate this element <i>only</i> if no master data lookup is desired.<br>Option 2 within choice%1 of <b>cmn:SenderInfo</b> contains full FromBusinessPartyInfo business address field data that is populated by the customer directly in the interface. Populate this element fully <i>only</i> if no master data lookup is desired.                                  |
|              |  |  | cmn:FromBusinessPartyLookupId | 0...1<br>0/*  | String | Option 1 for the SenderInfo group. <b>cmn:FromBusinessPartyLookupId</b> is a look-up identifier associated with the sold from business entity from the provided enumeration list. Use this value will as the look-up key in master data to populate the details in <b>cmn:FromBusinessPartyInfo</b> . <sup>1</sup><br><br> This field is optional, but may be used for master data lookup in TraceLink. An error is thrown if both cmn:FromBusinessPartyLookupId and <b>cmn:FromBusinessPartyInfo</b> are populated. |
|              |  |  | @type                         | 1...1<br>1/*  | String | <b>Required.</b> The type of the sold from business entity identifier. See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | cmn:FromBusinessPartyInfo     | 0...1<br>1/*  | -      | <b>Conditionally required</b> if <b>cmn:SenderInfo</b> is populated, but <b>cmn:FromBusinessPartyLookupId</b> is not populated. Option 2 for the <b>cmn:SenderInfo</b> group. This field contains full FromBusinessPartyInfo business address field data that will be populated by the customer directly in the interface. Populate this element fully only if no master data look-up is desired.                                                                                                                                                                                                       |
|              |  |  | cmn:BusinessId                | 1...*<br>1/*  | String | <b>Required.</b> The BusinessId field indicates the identifier associated with the business party who owns the goods at the time of the shipment. This value is mandatory for regulatory reporting. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | @type                         | 1...1<br>1/*  | String | <b>Required.</b> The business id type. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.<br><br> Only one of the following values may be used per message:<br><ul style="list-style-type: none"><li>RU_INN_FOREIGN_ENTITY</li></ul>                                                                                                                                                                                                                                                 |

<sup>1</sup>13655<sup>2</sup>8888882028677

| Data Element |  |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                              |
|--------------|--|--|--|--|----------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                            |               |        | <ul style="list-style-type: none"> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul>                                                                                                                                              |
|              |  |  |  |  | cmn:BusinessClassification | 0...1<br>0/*  | String | :<br>Classifies the business type of the TraceLink customer or trading partner.<br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                     |
|              |  |  |  |  | BusinessInfo               | 0...1<br>-    | -      | Populated with the business name and address of the owning party of the goods.                                                                                                                                                           |
|              |  |  |  |  | cmn:BusinessName           | 1...1<br>1/*  | String | <b>Required.</b> The business name of the TraceLink Customer or Trading Partner. <sup>1</sup>                                                                                                                                            |
|              |  |  |  |  | cmn:Street1                | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> . <sup>2</sup>                                                                                                                |
|              |  |  |  |  | cmn:Street2                | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> . <sup>3</sup>                                                                                                                                |
|              |  |  |  |  | cmn:City                   | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> . <sup>4</sup>                                                                                                                                             |
|              |  |  |  |  | cmn:Village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> . |
|              |  |  |  |  | cmn:Township               | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District               | 0...1<br>0/*  | String | District Code. <sup>5</sup>                                                                                                                                                                                                              |

<sup>1</sup>Kendall Pharma<sup>2</sup>300 Trade Center<sup>3</sup>Suite 7690<sup>4</sup>Woburn<sup>5</sup>002

| Data Element |  |  |  |          |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|----------|-------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |                         |               |        |  Must be a 3-digit numeric code.                                                                                                                                                                                                                                               |
|              |  |  |  |          | cmn:StateOrRegion       | 1...1<br>1/*  | String | <b>Required.</b> The standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> . <sup>1</sup> See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                          |
|              |  |  |  |          | cmn:PostalCode          | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> . <sup>2</sup>                                                                                                                                                                                                                                                  |
|              |  |  |  |          | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . <sup>3</sup> See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                                          |
|              |  |  |  |          | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |          | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br> Maximum 36 characters, using the digits 0-9 and letters A-F.                                                                                                                   |
|              |  |  |  |          | cmn:HouseGUID           | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br> Maximum 36 characters, using the digits 0-9 and letters A-F.                                                                                                             |
|              |  |  |  |          | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                                                                                            |
|              |  |  |  |          | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                                                                                             |
|              |  |  |  | choice%2 |                         | 0...1<br>-    | Choice | Optional choice element: No error if neither are present.<br>Option 1 within choice%2of senderInfo contains only the <b>cmn:ShipFromLocationLookupId</b> (in this case TraceLink populates all of the ShipFromLocationInfo fielded data based on company location master data lookup). Populate this element only if master data lookup is desire. This choice is |

<sup>1</sup>MA<sup>2</sup>01801<sup>3</sup>US

| Data Element |  |  |  |                              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|------------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                              |               |        | <p>restricted to TraceLink Customers only.</p> <p> Option 1 is for use by TraceLink Customers only.</p> <p>Option 2 within choice2 of senderInfo contains full <b>cmn:ShipFromLocationInfo</b> business address fielded data that is populated by the customer directly in the interface. Populate this element fully only if no master data lookup is desired.</p> |
|              |  |  |  | cmn:ShipFromLocationLookupId | 0...1<br>1/*  | String | Option 1 for the SenderInfo complex message. This field is a partner identifier (e.g. GLN, DUNS), which triggers the look-up of the partner's address information in TraceLink (the master data). This information then populates the details in <b>cmn:ShipFromLocationInfo</b> . <sup>1</sup>                                                                                                                                                        |
|              |  |  |  | @type                        | 1...1<br>1/*  | String | <b>Required.</b> Ship-from location lookup id type.<br>See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | cmn:ShipFromLocationInfo     | 0...1<br>-    | -      | This is Option 2 for the <b>cmn:SenderInfo</b> group. The full business information associated with the ship-from location is provided directly. Countries outside the US do not track sold from business and ship-from location separately.                                                                                                                                                                                                           |
|              |  |  |  | cmn:FacilityId               | 0...*<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:LocationInfo</b> is populated and <b>cmn:ShipFromLocationLookupId</b> is not present.<br>This field is populated with either the ship-from Location Identifier or the ship-to location identifier. <sup>2</sup>                                                                                                                                                                                                |
|              |  |  |  | @type                        | 1...1<br>1/*  | String | <p><b>Required.</b> The business id type.<br/>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> <p> Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul>                                     |
|              |  |  |  | cmn:LocationInfo             | 0...1<br>-    | String | <b>Conditionally required</b> for the US. This field is populated with the business name and address of the <b>cmn:ShipFrom</b> business entity.                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>1056231<sup>2</sup>8888882028655

| Data Element |  |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|-------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:BusinessName  | 1...1<br>1/*  | String | <b>Required.</b> The business name of the TraceLink Customer or Trading Partner. <sup>1</sup>                                                                                                                                                                                            |
|              |  |  |  |  | cmn:Street1       | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> . <sup>2</sup>                                                                                                                                                                |
|              |  |  |  |  | cmn:Street2       | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> . <sup>3</sup>                                                                                                                                                                                |
|              |  |  |  |  | cmn:City          | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> . <sup>4</sup>                                                                                                                                                                                             |
|              |  |  |  |  | cmn:Village       | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber   | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                                                 |
|              |  |  |  |  | cmn:Township      | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District      | 0...1<br>0/*  | String | District Code. <sup>5</sup><br><div> Must be a 3-digit numeric code.</div>                                                                                                                            |
|              |  |  |  |  | cmn:StateOrRegion | 1...1<br>1/*  | String | <b>Required.</b> The standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> . <sup>6</sup> See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  | cmn:PostalCode    | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> . <sup>7</sup>                                                                                                                                                                         |

<sup>1</sup>Kendall Pharma<sup>2</sup>300 Trade Center<sup>3</sup>Suite 7690<sup>4</sup>Woburn<sup>5</sup>002<sup>6</sup>MA<sup>7</sup>01801

| Data Element |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--|-------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . <sup>1</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                            |
|              |  |  |  |  | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F.                                                                                    |
|              |  |  |  |  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F.                                                                              |
|              |  |  |  |  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                                                                 |
|              |  |  |  |  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:LicenseNumber       | 0...*<br>0/*  | String | Populate with the license number of the ship-to or ship-from facility. This is contingent on if this field is associated with the <b>cmn:ShipFromLocationInfo</b> or <b>cmn:ShipToLocationInfo</b> element. This element may be repeated to include as many license numbers as required (e.g. state and federal license). <sup>2</sup> |
|              |  |  |  |  | @state                  | 0...1<br>0/*  | String | This attribute is used to give additional context to the LicenseNumber field. The state or region in which the trading partner is licensed, using the standard two-letter abbreviation specified in ISO 3166-2:1998 country sub-division code. <sup>3</sup>                                                                            |
|              |  |  |  |  | @agency                 | 0...1<br>0/*  | String | This attribute is used to give additional context to the LicenseNumber field. It indicates the agency that granted the license to the facility (e.g. Florida DOH, NABP). <sup>4</sup>                                                                                                                                                  |
|              |  |  |  |  | cmn:ContactInfo         | 0...1         | String | Contains contact information for use by downstream trading partners to authenticate (i.e. verify) the                                                                                                                                                                                                                                  |

<sup>1</sup>US<sup>2</sup>8888800003604<sup>3</sup>TN<sup>4</sup>BOP

| Data Element |  |  |  |                  |               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|------------------|---------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                  |               |               |        | <p>message information recorded on the pedigree with the sender party. This field must contain a name and telephone number but could also include an individual's title, email, and/or URL.</p> <p> Do not include for Ship-To Location.</p>                                                                                                                                                                                                                                      |
|              |  |  |  |                  | cmn:Name      | 0...1<br>0/*  | String | The name of the contact department or individual at the designated company. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |                  | cmn:Title     | 0...1<br>0/*  | String | Title information is optional within <b>cmn:ContactInfo</b> . The title refers to the individual's job title who is indicated in the Name field. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |                  | cmn:Telephone | 1...1<br>1/*  | String | <b>Required.</b> The phone number of the contact department or individual at the designated company. This value must begin with the "+" character followed by the Country Calling Code. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |                  | cmn:Email     | 0...1<br>0/*  | String | The email address of the contact department or individual at the designated company. Should be included if available. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |                  | cmn:Url       | 0...1<br>0/*  | String | URL information is optional within <b>cmn:ContactInfo</b> . The URL refers to the designated company's web address that facilitates authentication. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | cmn:ReceiverInfo |               | 0...1<br>-    | String | <p><b>Required.</b></p> <p>Information about the supply chain partner that is receiving the shipment. <b>cmn:ReceiverInfo</b> contains an XML Choice element on the <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ShipToLocationLookupId</b> that decide whether master data look-up is used to populate the address, license, and contact elements.</p>                                                                                                                                                                                                             |
|              |  |  |  | choice%1         |               | 0...1<br>-    | Choice | <p>Option 1 within choice%1 of <b>cmn:ReceiverInfo</b> contains only <b>cmn:ToBusinessPartyLookupId</b> (in this case TraceLink populates all of the ToBusinessPartyInfo field data based on company master data lookup). Populate this element <i>only</i> if master data lookup is desired.</p> <p>Option 2 within choice%1 of <b>cmn:ReceiverInfo</b> contains full ToBusinessPartyInfo business address field data that is populated by the customer directly in the interface. Populate this element fully <i>only</i> if no master data lookup is desired.</p> |

<sup>1</sup>Customer Service<sup>2</sup>Customer Service Representative<sup>3</sup>+1-781-555-5624<sup>4</sup>support@kendallpharma.com<sup>5</sup>www.KendallPharma.com

| Data Element |  |  |  |                             |                | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|-----------------------------|----------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:ToBusinessPartyLookupId |                | 0...1<br>0/*  | String | <p>Option 1 for <b>cmn:ReceiverInfo</b>. A look-up identifier associated with the sold to business entity from the provided enumeration list. Use this value as the look-up key in master data to populate the details in ToBusinessPartyInfo.<sup>1</sup></p> <p> This field is optional, but may be used for master data lookup in TraceLink. An error is thrown if both cmn:ToBusinessPartyLookupId and <b>cmn:ToBusinessPartyInfo</b> are populated.</p> |
|              |  |  |  |                             | @type          | 1...1<br>1/*  | String | <p><b>Required.</b> The type of the sold to business entity identifier.</p> <p>See the <a href="#">LocationLookupId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | cmn:ToBusinessPartyInfo     |                | 0...1<br>-    | String | <p><b>Conditionally required</b> if <b>cmn:ToBusinessPartyLookupId</b> is not populated. Full business information associated with the sold to business entity. Option 2 for <b>cmn:ReceiverInfo</b>.</p>                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |                             | cmn:BusinessId | 1...*<br>1/*  | String | <p><b>Required.</b> This field is populated with the full business information associated with the sold to business entity. This value is mandatory for regulatory reporting.<sup>2</sup></p>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |                             | @type          | 1...1<br>1/*  | String | <p><b>Required.</b> The business id type.</p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> <p> Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>• RU_INN_FOREIGN_ENTITY</li> <li>• RU_INN_INDIV</li> <li>• RU_INN_LOCAL_ENTITY</li> </ul>                                                                                                                     |
|              |  |  |  | cmn:BusinessClassification  |                | 0...1<br>1/*  | String | <p><b>Conditionally required:</b></p> <ul style="list-style-type: none"> <li>• For Argentina.</li> <li>• If <b>cmn:shipToCountryCode</b> = <b>KR</b> and <b>ReceiptDistributionType</b> = <b>INCOUNTRYRETURN</b>.</li> </ul> <p>This field classifies the business type of the receiving business entity.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li>• <b>MANUFACTURER</b></li> <li>• <b>DISTRIBUTOR</b></li> </ul>                                                                                                        |

<sup>1</sup>3333331013655<sup>2</sup>8888882028677



| Data Element |  |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                              |
|--------------|--|--|--|--|-------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                   |               |        | <ul style="list-style-type: none"> <li>• <a href="#">LOGISTICS</a></li> <li>• <a href="#">WHOLESALE</a></li> <li>• <a href="#">PHARMACY</a></li> <li>• <a href="#">HEALTHCARE</a></li> </ul>                                             |
|              |  |  |  |  | cmn:BusinessInfo  | 0...1<br>0/*  | String | Populated with the business name and address of the sold to business entity.                                                                                                                                                             |
|              |  |  |  |  | cmn:BusinessName  | 1...1<br>1/*  | String | <b>Required.</b> The name of the receiving business entity.                                                                                                                                                                              |
|              |  |  |  |  | cmn:Street1       | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                             |
|              |  |  |  |  | cmn:Street2       | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                             |
|              |  |  |  |  | cmn:City          | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                          |
|              |  |  |  |  | cmn:Village       | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber   | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> . |
|              |  |  |  |  | cmn:Township      | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District      | 0...1<br>0/*  | String | District Code.<br><div>  Must be a 3-digit numeric code.         </div>                                                                             |
|              |  |  |  |  | cmn:StateOrRegion | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> .                                                     |
|              |  |  |  |  | cmn:PostalCode    | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                      |

| Data Element |  |  |  |  |          |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|----------|----------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |          | cmn:Country                | 1...1<br>1/*  | String | <b>Required.</b> Standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . See the <a href="#">ISOCountryCode</a> enumeration list for valid values.      |
|              |  |  |  |  |          | cmn:CorporateFax           | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                       |
|              |  |  |  |  |          | cmn:AddressObjectGUID      | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F.       |
|              |  |  |  |  |          | cmn:HouseGUID              | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |  |          | cmn:TaxRegistrationCode    | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                    |
|              |  |  |  |  |          | cmn:PremisesCode           | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                     |
|              |  |  |  |  | choice%2 |                            | 0...1<br>-    | Choice | Can choose either <b>cmn:ShipToLocationLookupId</b> or <b>cmn:ShipToLocationInfo</b> ; cannot choose both. No error thrown if none are present.                                                                                                           |
|              |  |  |  |  |          | cmn:ShipToLocationLookupId | 0...1<br>0/*  | String | Option 1 for ReceiverInfo. A look-up identifier associated with the ship-to location using the provided enumeration list. This value will be used as the look-up key in master data to populate the details in ShipToLocationInfo.                        |
|              |  |  |  |  | @type    |                            | 1...1<br>1/*  | String | <b>Required.</b> Ship-to location type. See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                       |
|              |  |  |  |  |          | cmn:ShipToLocationInfo     | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:ShipToLocationLookupId</b> is not present. Option 2 for ReceiverInfo group. This field is populated with the full business information associated with the ship-to location, which is provided directly.          |
|              |  |  |  |  |          | cmn:FacilityId             | 0...*<br>0/*  | String | <b>Required.</b> This field is populated with either the ship-from Location Identifier or the ship-to location identifier. <sup>1</sup>                                                                                                                   |

<sup>1</sup>8888882.02865.0

| Data Element |  |  |  |  |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                  |               |        |  For the US: Provide a DEA, GLN, HIN, or SGLN identifier associated with the ship-to location.                                                                                                                                                                                                                          |
|              |  |  |  |  | @type            | 1...1<br>1/*  | String | <b>Required.</b> The facility id type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.<br><br> Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> |
|              |  |  |  |  | cmn:LocationInfo | 0...1<br>1/*  | String | <b>Conditionally required</b> for the US. This field is populated with the business name and address of the business entity.                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | cmn:BusinessName | 1...1<br>1/*  | String | <b>Required.</b> The name of the receiving business entity.                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | cmn:Street1      | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | cmn:Street2      | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | cmn:City         | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | cmn:Village      | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:HouseNumber  | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                                                                                                                                                                   |
|              |  |  |  |  | cmn:Township     | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:District     | 0...1<br>0/*  | String | District Code.                                                                                                                                                                                                                                                                                                                                                                                             |

| Data Element |  |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--|-------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                         |               |        | <div>  Must be a 3-digit numeric code. </div>                                                                                                                                |
|              |  |  |  |  |  | cmn:StateOrRegion       | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> .                                                                            |
|              |  |  |  |  |  | cmn:PostalCode          | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                             |
|              |  |  |  |  |  | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> Standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . See the <a href="#">ISOCountryCode</a> enumeration list for valid values.            |
|              |  |  |  |  |  | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <div>  Maximum 36 characters, using the digits 0-9 and letters A-F. </div>       |
|              |  |  |  |  |  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS). <div>  Maximum 36 characters, using the digits 0-9 and letters A-F. </div> |
|              |  |  |  |  |  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                          |
|              |  |  |  |  |  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                           |
|              |  |  |  |  |  | cmn:LicenseNumber       | 0...*<br>0/*  | String | <b>Conditionally required</b> for the US. The LicenseNumber field is populated with the license number of the ship-to or ship-from facility. This element may be repeated to include as many license numbers as required (such as, state and federal license).  |
|              |  |  |  |  |  | @state                  | 0...1<br>0/*  | String | Use the standard two-letter abbreviation specified in ISO 3166-2:1998 country sub-division code. This attribute is used to give additional context to the LicenseNumber field. It indicates the state or region in which the trading partner is licensed.       |
|              |  |  |  |  |  | @agency                 | 0...1<br>0/*  | String | This attribute is used to give additional context to the LicenseNumber field. It indicates the agency that granted the license to the facility (e.g. Florida DOH, NABP).                                                                                        |

| Data Element |  |  |  |  |                                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|----------------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:ContactInfo                  | 0..1<br>-     | -      | Do not include for Ship-To Location as it is not used.                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | cmn:CarrierInfo                  | 0..*<br>-     | -      | The full business information associated with the carrier responsible for delivering the shipment. <b>cmn:CarrierInfo</b> contains an XML Choice element that governs whether master data lookup will be used to populate the address elements. The choice elements allow only one of the element sets contained in the choice declaration to be present within the containing element.                         |
|              |  |  |  |  | Choice                           | 1..1<br>-     | Choice | <b>Required.</b> Must choose between <b>cmn:CarrierBusinessPartyLookupId</b> and <b>cmn:CarrierBusinessPartyInfo</b> . Cannot choose both or none.                                                                                                                                                                                                                                                              |
|              |  |  |  |  | cmn:CarrierBusinessPartyLookupId | 0..1<br>1/*   | String | <b>Conditionally required</b> if <b>cmn:CarrierBusinessPartyInfo</b> is not populated. This is Option 1 for <b>cmn:CarrierInfo</b> . This value indicates the look-up identifier associated with the Carrier entity from the provided enumeration list. This value will be used as the look-up key in master data to populate the details in CarrierBusinessPartyInfo. <sup>1</sup>                             |
|              |  |  |  |  | @type                            | 1..1<br>1/*   | String | <b>Required.</b> The business party type. See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | cmn:CarrierBusinessPartyInfo     | 0..1<br>-     | -      | <b>Conditionally required</b> if <b>cmn:CarrierBusinessPartyLookupId</b> is not populated. This is Option 2 for <b>cmn:CarrierInfo</b> option. This element contains the full business information associated with the transportation carrier business entity.                                                                                                                                                  |
|              |  |  |  |  | cmn:BusinessId                   | 1..*<br>1/*   | String | <b>Required.</b> Indicates the identifier associated with either the sold from business entity or the sold to business entity. This value is mandatory for regulatory reporting. Different countries require different values as noted below:                                                                                                                                                                   |
|              |  |  |  |  | @type                            | 1..1<br>1/*   | String | <b>Required.</b> The business id type. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> |
|              |  |  |  |  | cmn:BusinessClassification       | 0..1<br>0/*   | String | This field classifies the business type of the TraceLink customer or trading partner. Valid values:                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>00.000.000/0001-00

| Data Element |  |  |  |  |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                  |               |        | <ul style="list-style-type: none"> <li>• <a href="#">CARRYING_FORWARDING_AGENT</a></li> <li>• <a href="#">CHEMIST</a></li> <li>• <a href="#">DISTRIBUTOR</a></li> <li>• <a href="#">EXPORTER</a></li> <li>• <a href="#">HEALTHCARE</a></li> <li>• <a href="#">IMPORTER</a></li> <li>• <a href="#">LOGISTICS</a></li> <li>• <a href="#">MANUFACTURER</a></li> <li>• <a href="#">PHARMACY</a></li> <li>• <a href="#">STOCKIST</a></li> <li>• <a href="#">WHOLESALE</a></li> </ul> |
|              |  |  |  |  | cmn:BusinessInfo | 0...1<br>-    | -      | Populated with the business name and address of the transportation carrier business entity.                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:BusinessName | 1...1<br>1/*  | String | <b>Required.</b> The name of the receiving business entity.                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:Street1      | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:Street2      | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:City         | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | cmn:Village      | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | cmn:HouseNumber  | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                                                                                                                                                                                                                                        |
|              |  |  |  |  | cmn:Township     | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | cmn:District     | 0...1         | String | District Code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Data Element |  |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|--|---------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                           |               |        | <div>  Must be a 3-digit numeric code. </div>                                                                                                                                                                 |
|              |  |  |  |  |  | cmn:StateOrRegion         | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> .                                                                                                             |
|              |  |  |  |  |  | cmn:PostalCode            | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                              |
|              |  |  |  |  |  | cmn:Country               | 1...1<br>1/*  | String | <b>Required.</b> Standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                             |
|              |  |  |  |  |  | cmn:CorporateFax          | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | cmn:AddressObjectGUID     | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <div>  Maximum 36 characters, using the digits 0-9 and letters A-F. </div>                                        |
|              |  |  |  |  |  | cmn:HouseGUID             | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS). <div>  Maximum 36 characters, using the digits 0-9 and letters A-F. </div>                                  |
|              |  |  |  |  |  | cmn:TaxRegistrationCode   | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                           |
|              |  |  |  |  |  | cmn:PremisesCode          | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                            |
|              |  |  |  |  |  | cmn:WarehouseOperatorName | 0...1<br>0/*  | String | <b>Conditionally required</b> for China. This field indicates the name of the person responsible for warehouse operations. This element can be communicated at any time (e.g. with, before, or after the order details or picked items have been communicated). <sup>1</sup>                     |
|              |  |  |  |  |  | som:AddPickedItems        | 0...1<br>-    | -      | List of serial numbers for the outermost handling units (e.g. container/tote) picked for this delivery. TraceLink will look up the child aggregations of the serial numbers provided in the list and update the container and all sub-child items with the picked and subsequent shipped status. |

<sup>1</sup>John Smith

| Data Element |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:Serial               | 1...*<br>1/*  | String | <b>Required.</b> This attribute identifies the serial numbers included in the transaction and their format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                 |
|              |  |  | @format                  | 0...1<br>0/*  | String | <b>Required.</b> The format of the serial number. See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                      |
|              |  |  | @orderItemNumber         | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                                                                                                                                                            |
|              |  |  | som:RemoveUnpickedItems  | 0...1<br>-    | -      | List of serial numbers that were previously reported as picked for this delivery, but have been unpicked (e.g. will not be part of the delivery). TraceLink looks up the child aggregations of the serial numbers provided in the list and updates the container and all sub-child items with the available status and disassociates them from the delivery.                                                                             |
|              |  |  | cmn:Serial               | 1...*<br>1/*  | String | <b>Required.</b> Serial number previously reported as picked for this delivery. One serial number is included per picked container (or item if shipping loose items). <sup>2</sup>                                                                                                                                                                                                                                                       |
|              |  |  | @format                  | 0...1<br>0/*  | String | Indicates the serial number format of the number(s) provided in the Serial field. See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                      |
|              |  |  | som:AddPickedLot         | 0...1<br>-    | -      | Product code and lot number used to determine the serial number content of a shipment created through a TL XML message that specifies a product code and lot number. Decommissioned and destroyed serial numbers are excluded from serial number content added via <b>som:AddPickedLot</b> . Decommissioning or destroying serial numbers <i>after</i> adding them to a shipment via <b>cmn:AddPickedLot</b> results in message failure. |
|              |  |  | cmn:ProductLotNumbers    | 1...*<br>-    | -      | <b>Required.</b> Product code data elements within a choice grouping.                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | choice%1                 | 1...1<br>-    | Choice | <b>Required.</b> Choice of either an <b>cmn:InternalMaterialCode</b> or <b>cmn:CountryDrugCode</b> with type attribute. At least one is mandatory.                                                                                                                                                                                                                                                                                       |
|              |  |  | cmn:InternalMaterialCode | 0...1<br>0/*  | String | Internal material number for the product in the brand owner's internal systems (e.g. ERP). <sup>3</sup><br><br><div>  The message may include either cmn:InternalMaterialCode, cmn:CountryDrugCode, or both, but all packaging levels must be consistent. </div>                                                                                    |

<sup>1</sup>015088202501033321100000060001<sup>2</sup>015088202501033321100000060001<sup>3</sup>100234



| Data Element |  |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:CountryDrugCode      | 0...1<br>1/*  | String | The national drug code for the commissioned item (e.g. NDC number for US products). <sup>1</sup><br><br><div> <i>i</i> The message may include either cmn:InternalMaterialCode, cmn:CountryDrugCode, or both, but all packaging levels must be consistent. </div>        |
|              |  |  |  | @type                    | 0...1<br>0/*  | String | <b>Required.</b> The national drug code type. <sup>2</sup><br>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                 |
|              |  |  |  | cmn:LotNumber            | 1...1<br>1/*  | String | <b>Required.</b> The lot or batch code for the serialized item in an alphanumeric string. <sup>3</sup>                                                                                                                                                                   |
|              |  |  |  | som:RemoveUnpickedLot    | 0...1<br>-    | -      | Populate with product code(s) and lot number(s) that are used to determine serial number content of unpicked product for a shipment created through a TL XML message that specifies a product code and lot number.                                                       |
|              |  |  |  | cmn:ProductLotNumbers    | 1...*<br>-    | -      | <b>Required.</b> Product code data elements within a choice grouping.                                                                                                                                                                                                    |
|              |  |  |  | choice%1                 | 1...1<br>-    | Choice | <b>Required.</b> Choice of either an <b>cmn:InternalMaterialCode</b> or <b>cmn:CountryDrugCode</b> with type attribute. At least one is mandatory.                                                                                                                       |
|              |  |  |  | cmn:InternalMaterialCode | 0...1<br>0/*  | String | Internal material number for the product in the brand owner's internal systems (e.g. ERP). <sup>4</sup><br><br><div> <i>i</i> The message may include either cmn:InternalMaterialCode, cmn:CountryDrugCode, or both, but all packaging levels must be consistent. </div> |
|              |  |  |  | cmn:CountryDrugCode      | 0...1<br>1/*  | String | The national drug code for the commissioned item (e.g. NDC number for US products). <sup>5</sup><br><br><div> <i>i</i> The message may include either cmn:InternalMaterialCode, cmn:CountryDrugCode, or both, but all packaging levels must be consistent. </div>        |

<sup>1</sup>0069-4220-66<sup>2</sup>US\_NDC442<sup>3</sup>ABC123<sup>4</sup>100234<sup>5</sup>0069-4220-66

| Data Element |  |  |  |                   |       | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|-------------------|-------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                   | @type | 0...1<br>0/*  | String   | <b>Required.</b> The national drug code type. <sup>1</sup><br>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | cmn:LotNumber     |       | 1...1<br>1/*  | String   | <b>Required.</b> The lot or batch code for the serialized item in an alphanumeric string. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | som:Aggregation   |       | 0...*<br>-    | -        | <p>The Aggregation item group is used to communicate new aggregations created by the warehouse that are included in the shipment.</p> <p>The PickedItems will continue to include the top level container serial numbers and/or loose items. If the warehouse created a new aggregation (e.g. created a new pallet, created a new mixed case), the aggregation hierarchies created in the warehouse are communicated in the Aggregation element.</p> <p>If an existing case is shipped, the case just needs to be scanned and the case hierarchy would not be provided. If a new mixed case is created, the hierarchy for the new case will be communicated.</p> <p>This enables the distribution warehouse to locally manage changes to aggregation hierarchies and communicate just the new aggregation hierarchies of the shipped goods at the time of shipment, without having to send disaggregation and aggregation events. The backend will perform the implicit disaggregate and aggregate operations to achieve the end state aggregation hierarchy prior to processing the shipment. It will also auto-commission the SSCC numbers for new cases and pallets when these SSCC numbers are not yet commissioned.</p> |
|              |  |  |  | cmn:EventDateTime |       | 0...1<br>0/*  | DateTime | <p>Timestamp of date/time of aggregation event with the UTC time zone indicator in format: YYYY-MM-DDTHH:MM:SS.ssZ.</p> <p> If not present, the system defaults to a GMT date/time previous to the shipment date/time populated in som:MessageBody   <b>cmn:EventDateTime</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | cmn:EventLocation |       | 1...1<br>1/*  | String   | <b>Required.</b> Site-level SGLN of the location where the event occurred. SGLN format will be numeric component only, with urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | cmn:ParentSerial  |       | 1...1<br>1/*  | String   | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format WITHOUT parenthesis for the AI keys. AI (01) (21) formatted serial number for GTINs -or- AI (00) formatted serial number for SSCCs. Non-GS1 serial numbers (e.g. China) are expressed in native format.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | @companyPrefix    |       | 0...1<br>-    | -        | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>US\_NDC442<sup>2</sup>ABC123

| Data Element |  |  |                    |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                               |
|--------------|--|--|--------------------|------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                    | @filterValue     | 0...1<br>-    | -      | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                 |
|              |  |  |                    | @format          | 0...1<br>1/*  | String | <b>Required.</b> The format of the serial number. See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                       |
|              |  |  |                    | @packedStatus    | 0...1<br>1/*  | String | The packed status of the item or container using the supported enumeration values. See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                |
|              |  |  | cmn:PackagingLevel |                  | 0...1<br>0*   | String | The packaging level of the commissioned item using the supported enumeration values. See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                            |
|              |  |  | cmn:NumberList     |                  | 1...1<br>-    | -      | <b>Required.</b> Contains the list of serial numbers for the items packed into the parent serial number                                                                                                                                                                                   |
|              |  |  | cmn:Serial         |                  | 1...*<br>1/*  | String | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format WITHOUT parenthesis for the AI keys. AI (01) (21) formatted serial number for GTINs -or- AI (00) formatted serial number for SSCCs. Non-GS1 serial numbers (e.g. China) are expressed in native format. |
|              |  |  |                    | @companyPrefix   | 0...1<br>0/*  | String | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                           |
|              |  |  |                    | @filterValue     | 0...1<br>0/*  | String | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                 |
|              |  |  |                    | @format          | 0...1<br>1/*  | String | <b>Required.</b> The format of the serial number. See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                       |
|              |  |  |                    | @packedStatus    | 0...1<br>1/*  | String | The packed status of the item or container using the supported enumeration values. See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                |
|              |  |  |                    | @orderItemNumber | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:orderItem</b> .                                                                                                                             |

## Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<som:SOMSalesShipmentMessage xmlns="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
```

```

    <cmn:FileReceiverNumber>88888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>20130821063132</cmn:FileControlNumber>
    <cmn:FileDate>2018-06-12</cmn:FileDate>
    <cmn:FileTime>05:31:32Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <cmn:LocationId>412333444</cmn:LocationId>
    <cmn:DeliveryNumber>4610031</cmn:DeliveryNumber>
    <!--

```

The delivery complete flag is set to true because this is an example where all of the information (order detail and picked serial numbers) are provided in a single message.

If only partial information was provided (e.g. order detail only, picked items sent incrementtally, etc) then the delivery complete flag would be set to false for all intermediate messages,

and then set to true when the delivery is complete. The delivery complete flag instructs TraceLink to process the outbound delivery, update the status of all serial numbers and sub-child

aggregations to shipped, and trigger generation of regulatory reporting messages based on customer configuration.

```

-->

```

```

    <cmn:DeliveryCompleteFlag>true</cmn:DeliveryCompleteFlag>
  <som:OrderDetails>
    <cmn:EntryPort></cmn:EntryPort>
    <cmn:ExitPort></cmn:ExitPort>
    <cmn:TransactionIdentifier type="PO" date="2018-06-12">PO303005</cmn:TransactionIdentifier>
    <cmn:TransactionIdentifier type="INVOICE" date="2018-06-12">INV9978</cmn:TransactionIdentifier>
    <cmn:TransactionDate>2018-06-12</cmn:TransactionDate>
    <cmn:TransactionTime>05:31:32Z</cmn:TransactionTime>
    <cmn:ShipToCountryCode>US</cmn:ShipToCountryCode>
    <cmn:SalesDistributionType>INCOUNTRYSALE</cmn:SalesDistributionType>
    <cmn:SupplyType>MedicalCareDistribution</cmn:SupplyType>
    <cmn:ContractType>PrivateContract</cmn:ContractType>
    <cmn:ContractNumber>C107</cmn:ContractNumber>
    <cmn:FundingSource>OwnFunds</cmn:FundingSource>
    <cmn:OrderItemList>
      <!--

```

First order item example demonstrates use of the InternalMaterialCode. Quantity represents quantity of EACHES.

```

-->

```

```

    <cmn:OrderItem>
      <cmn:OrderItemNumber>810</cmn:OrderItemNumber>
      <cmn:InternalMaterialCode>133661</cmn:InternalMaterialCode>

```

```

        <cmn:LotNumber>PPP555</cmn:LotNumber>
        <cmn:Quantity>500</cmn:Quantity>
    </cmn:OrderItem>
    <!--
        Second order item example demonstrates use of the the packaging level item code keyed to the
        item serial numbers (GTIN-14).
        Quantity represents quantity of EACHES.
    -->
    <cmn:OrderItem>
        <cmn:OrderItemNumber>811</cmn:OrderItemNumber>
        <cmn:PackagingItemCode type="GTIN-14">00992326050107</cmn:PackagingItemCode>
        <cmn:LotNumber>PPP556</cmn:LotNumber>
        <cmn:Quantity>450</cmn:Quantity>
        <cmn:UnitPrice currencyCode="USD">100.00</cmn:UnitPrice>
        <cmn:VAT currencyCode="USD">50.00</cmn:VAT>
        <cmn:GrossPrice currencyCode="USD">150.00</cmn:GrossPrice>
        <cmn:IsSerialized>false</cmn:IsSerialized>
        <cmn:TransactionIdentifier type="PO" date="2018-06-12">PO1078</cmn:TransactionIdentifier>
    </cmn:OrderItem>
</cmn:OrderItemList>
<cmn:SenderInfo>
    <!--
        Example where full Sold From Business Party and Ship From Location Info, License Info and
        Contact Info provided.
        No master data lookup is performed by TraceLink.
    -->
    <cmn:FromBusinessPartyInfo>
        <cmn:BusinessId type="DEA">712333444</cmn:BusinessId>
        <cmn:BusinessInfo>
            <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>
            <cmn:Street1>10 Welsh St</cmn:Street1>
            <cmn:City>Malden</cmn:City>
            <cmn:Village></cmn:Village>
            <cmn:HouseNumber></cmn:HouseNumber>
            <cmn:Township></cmn:Township>
            <cmn:StateOrRegion>MA</cmn:StateOrRegion>
            <cmn:PostalCode>02148</cmn:PostalCode>
            <cmn:Country>US</cmn:Country>
            <cmn:CorporateFax></cmn:CorporateFax>
            <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>

```

```

        <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
        <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
        <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:BusinessInfo>
</cmn:FromBusinessPartyInfo>
<cmn:ShipFromLocationInfo>
    <cmn:FacilityId type="GLN">8779891013658</cmn:FacilityId>
    <cmn:FacilityId type="SGLN">9997777.01994.0</cmn:FacilityId>
    <cmn:LocationInfo>
        <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>
        <cmn:Street1>10 Welsh St</cmn:Street1>
        <cmn:City>Malden</cmn:City>
        <cmn:Village></cmn:Village>
        <cmn:HouseNumber></cmn:HouseNumber>
        <cmn:Township></cmn:Township>
        <cmn:StateOrRegion>MA</cmn:StateOrRegion>
        <cmn:PostalCode>02148</cmn:PostalCode>
        <cmn:Country>US</cmn:Country>
        <cmn:CorporateFax></cmn:CorporateFax>
        <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>
        <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
        <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
        <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:LocationInfo>
    <cmn:LicenseNumber state="MA" agency="BORP">773BT8</cmn:LicenseNumber>
    <cmn:ContactInfo>
        <cmn:Name>Customer Service</cmn:Name>
        <cmn:Telephone>+1-781-555-5622</cmn:Telephone>
        <cmn:Email>support@claramanufacturing.com</cmn:Email>
    </cmn:ContactInfo>
</cmn:ShipFromLocationInfo>
</cmn:SenderInfo>
<cmn:ReceiverInfo>
    <!--

```

Example where only the Sold To Business Party and Ship To Location Lookup Ids are provided. This instructs TraceLink to perform master data lookup using the provided Ids to populate the valid identifiers permitted for the transaction (in this case US pedigree), and any other additional info required for the transaction (in this case for US pedigree, the address info and License Info for the receiving party).

```
-->
<!--<cmn:ToBusinessPartyLookupId type="DEA">412333444</cmn:ToBusinessPartyLookupId>-->
<cmn:ToBusinessPartyLookupId type="GCP">412333444</cmn:ToBusinessPartyLookupId>
<cmn:ShipToLocationLookupId type="GLN">8811891013778</cmn:ShipToLocationLookupId>
</cmn:ReceiverInfo>
</som:OrderDetails>
<cmn:WarehouseOperatorName>Patrick Murphy</cmn:WarehouseOperatorName>
<som:AddPickedItems>
  <!--
    These are the serial numbers for the outermost handling units picked for this delivery.
    In this example, there are 10 cases of the first order item, and 1 case of the second order item.
    If these 11 cases were aggregated onto a single pallet, then the single pallet SSCC code would
    have been provided instead of the 11 case serial numbers.
    TraceLink will look up the child aggregations of the serial numbers provided and update the
    container
    and all sub-child items with the picked and subsequent shipped status.
  -->
  <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="811">010088202501033821100000880001</cmn:Serial>
  <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="811">010088202501033821100000880002</cmn:Serial>
  <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="811">010088202501033821100000880003</cmn:Serial>
  <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="811">010088202501033821100000880051</cmn:Serial>
</som:AddPickedItems>
<som:AddPickedLot>
  <cmn:ProductLotNumbers>
    <cmn:CountryDrugCode type="US_NDC542">05552-5500-10</cmn:CountryDrugCode>
    <cmn:LotNumber>PPP557</cmn:LotNumber>
  </cmn:ProductLotNumbers>
</som:AddPickedLot>
</som:MessageBody>
</som:SOMSalesShipmentMessage>
```

Errors

| Data Element                    | Error Message                                          | Description                                                                                    |
|---------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Class 1                         |                                                        |                                                                                                |
| cmn:AllowShortVerificationCount | Cannot parse input data according to the presentation. | The error occurs if the source does not equal "true" or "false", or is not entirely lowercase. |

| Data Element                     | Error Message                                                                                         | Description                                                                                                               |
|----------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| cmn:BusinessId                   | Party type attribute is required when source FromBusinessPartyInfo/BusinessId is populated !!!        | The error occurs if BusinessId is populated, but BusinessLookupId is empty or null.                                       |
|                                  | Party type attribute is required when source ToBusinessPartyInfo/BusinessId is populated !!!          | The error occurs if BusinessId is populated, but BusinessLookupId is empty or null.                                       |
|                                  | Party type attribute is required when source CarrierBusinessPartyLookupId is populated !!!            | The error occurs if BusinessId is populated, but BusinessLookupId is empty or null.                                       |
| cmn:BusinessName                 | BusinessName required for US!!!                                                                       | The error occurs if cmn:ShipToCountryCode = US, but source is empty or null.                                              |
|                                  | From business party name is required !!!                                                              | The error occurs if cmn:ShipToCountryCode = US, but source is empty or null.                                              |
|                                  | Carrier name in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!!              | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |
|                                  | To BusinessParty Name is required !!!                                                                 | The error occurs if tl:shipToCountryCode = US, but source is empty or null.                                               |
| cmn:CarrierBusinessPartyLookupId | Party type attribute is required when source CarrierBusinessPartyLookupId is populated !!!            | The error occurs if source is populated, but @type attribute is empty or null.                                            |
| cmn:CarrierInfo                  | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!! | The error occurs if both cmn:ToBusinessPartyLookupId and cmn:ToBusinessPartyInfo are empty or null.                       |
|                                  | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                      | The error occurs if both cmn:ToBusinessPartyLookupId and cmn:ToBusinessPartyInfo are populated.                           |
| cmn:City                         | From business party city is required !!!                                                              | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.         |
|                                  | Ship From city is required !!!                                                                        | The error occurs if tl:shipToCountryCode = US and cmn:LocationInfo is populated, but the source is empty or null.         |
|                                  | To BusinessParty City is required !!!                                                                 | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.         |
|                                  | Ship To city is required !!!                                                                          | The error occurs if tl:shipToCountryCode = US, but source is empty or null.                                               |
|                                  | Carrier city in source cmn:City is required if cmn:BusinessInfo is populated !!!                      | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |



| Data Element               | Error Message                                                                                 | Description                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| cmn:Country                | To BusinessParty country code is required !!!                                                 | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.         |
|                            | From business party country code is required !!!                                              | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.         |
|                            | Ship To country code is required !!!                                                          | The error occurs if tl:shipToCountryCode = US, but source is empty or null.                                               |
|                            | Carrier Country in source cmn:Country is required if cmn:BusinessInfo is populated !!!        | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |
|                            | Ship From country code is required !!!                                                        | The error occurs if tl:shipToCountryCode = US and cmn:LocationInfo is populated, but the source is empty or null.         |
| cmn:DisaggregateFromParent | Cannot parse input data according to the presentation.                                        | The error occurs if the source does not equal "true" or "false", or is not entirely lowercase.                            |
| cmn:FacilityId             | Party type attribute is required when source ShipToLocationInfo/FacilityId is populated !!!   | The error occurs if source is populated, but @type attribute is empty or null.                                            |
|                            | Party type attribute is required when source ShipFromLocationInfo/FacilityId is populated !!! |                                                                                                                           |
| cmn:FileControlNumber      | Data Error: FileControlNumber occurs fewer times than its minimum number of occurrences.      | The error occurs if the source is empty or null.                                                                          |
| cmn:FileDate               | Data Error: FileDate occurs fewer times than its minimum number of occurrences.               |                                                                                                                           |
| cmn:FileReceiverNumber     | Data Error: FileReceiverNumber occurs fewer times than its minimum number of occurrences.     |                                                                                                                           |
|                            | Data Error: FileSenderNumber occurs fewer times than its minimum number of occurrences.       |                                                                                                                           |
| cmn:FileTime               | Data Error: FileTime occurs fewer times than its minimum number of occurrences.               | The error occurs if both InternalMaterialCode and PackagingItemCode are populated.                                        |
| cmn:OrderItem              | Only one of InternalMaterialCode OR PackagingItemCode is required !!!                         |                                                                                                                           |
|                            | Missing mandatory choice. One of InternalMaterialCode OR PackagingItemCode is required !!!    | The error occurs if both InternalMaterialCode and PackagingItemCode are empty or null.                                    |

| Data Element                                               | Error Message                                                                                             | Description                                                                                                               |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| cmn:PackagingItemCode                                      | Product type attribute is required when source PackagingItemCode is populated !!!                         | The error occurs if source is populated, but @type attribute is empty or null.                                            |
| cmn:PostalCode                                             | From business party postal code is required !!!                                                           | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.         |
|                                                            | Ship To postal address is required !!!                                                                    | The error occurs if tl:shipToCountryCode = US, but source is empty or null.                                               |
|                                                            | To BusinessParty postal code is required !!!                                                              | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.         |
|                                                            | Ship From postal address is required !!!                                                                  | The error occurs if tl:shipToCountryCode = US and cmn:LocationInfo is populated, but the source is empty or null.         |
|                                                            | Carrier PostalCode in source cmn:PostalCode is required if cmn:BusinessInfo is populated !!!              | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |
| cmn:Quantity                                               | Source Quantity is required !!!                                                                           | The error occurs if the source is empty or null.                                                                          |
|                                                            | Quantity is required if IsSerialized = "false".                                                           | The error occurs if IsSerialized = "false", but source is empty or null.                                                  |
| cmn:SenderInfo                                             | Missing mandatory choice. One of FromBusinessPartyLookupId OR FromBusinessPartyInfo group is required !!! | The error occurs if both cmn:FromBusinessPartyLookupId and cmn:FromBusinessPartyInfo are empty or null.                   |
|                                                            | Only one of FromBusinessPartyLookupId OR FromBusinessPartyInfo group is required !!!                      | The error occurs if both cmn:FromBusinessPartyLookupId and cmn:FromBusinessPartyInfo field are populated.                 |
| cmn:SenderInfo   <b>cmn:FromBusinessPartyLookupId</b>      | Party type attribute is required when source FromBusinessPartyLookupId is populated !!!                   | The error occurs if source is populated, but @type attribute is empty or null.                                            |
| cmn:Serial                                                 | Data Error: Serial occurs fewer times than its minimum number of occurrences.                             | The error occurs if the source is empty or null.                                                                          |
| cmn:ShipFromLocationInfo                                   | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!                        | The error occurs if both ShipFromLocationLookupId and ShipFromLocationInfo are populated.                                 |
| cmn:ShipFromLocationLookupId                               | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!                        | The error occurs if both ShipFromLocationLookupId and ShipFromLocationInfo are populated.                                 |
| cmn:ShipToLocationInfo   cmn:ContactInfo   <b>cmn:Name</b> | Contact name is required if the source contactInfo is populated !!!                                       | The error occurs if the source is empty or null.                                                                          |
| cmn:ShipToLocationLookupId                                 | Party type attribute is required when source ShipToLocationLookupId is populated !!!                      | The error occurs if source is populated, but @type attribute is empty or null.                                            |

| Data Element                                               | Error Message                                                                                                  | Description                                                                                                                        |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| cmn:StateOrRegion                                          | To BusinessParty State Code is required !!!                                                                    | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.                  |
|                                                            | Carrier StateOrRegion in source cmn:StateOrRegion is required if cmn:BusinessInfo is populated !!!             | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.          |
|                                                            | Ship To StateOrRegion in source cmn:StateOrRegion is required if cmn:BusinessInfo is populated !!!             | The error occurs if tl:shipToCountryCode = US, but source is empty or null.                                                        |
|                                                            | Ship From state or region code is required !!!                                                                 | The error occurs if tl:shipToCountryCode = US and cmn:LocationInfo is populated, but the source is empty or null.                  |
|                                                            | From business party state is required !!!                                                                      | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.                  |
| cmn:Street1                                                | Ship From street address is required !!!                                                                       | The error occurs if tl:shipToCountryCode = US and cmn:LocationInfo is populated, but the source is empty or null.                  |
|                                                            | Carrier Street1 in source cmn:Street1 is required if cmn:BusinessInfo is populated !!!                         | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.          |
|                                                            | Ship To street address is required !!!                                                                         | The error occurs if tl:shipToCountryCode = US, but source is empty or null.                                                        |
|                                                            | To BusinessParty Street Address is required !!!                                                                | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.                  |
|                                                            | From business party street address is required !!!                                                             | The error occurs if tl:shipToCountryCode = US and cmn:BusinessInfo is populated, but the source is empty or null.                  |
| cmn:SupplyType                                             | SupplyType is required if ShipFromCountryCode is "KR" and SalesDistributionType is <SalesDistributionType> !!! | The error occurs if ShipFromCountryCode = KR and SalesDistributionType = EXPORTSALE or INCOUNTRYSALE, but source is empty or null. |
| cmn:Telephone                                              | Data Error: Telephone occurs fewer times than its minimum number of occurrences.                               | The error occurs if the source is empty or null.                                                                                   |
| cmn:ToBusinessPartyLookupId                                | Party type attribute is required when source ToBusinessPartyLookupId is populated !!!                          | The error occurs if source is populated, but @type attribute is empty or null.                                                     |
| cmn:TransactionIdentifier                                  | Transaction identifier is required !!!                                                                         | The error occurs if the source is empty or null.                                                                                   |
| som:AddPickedLot   cmn:ProductLotNumbers   <b>choice%1</b> | Only one of either InternalMaterialCode OR CountryDrugCode is required !!!                                     | The error occurs if both InternalMaterialCode and CountryDrugCode are populated.                                                   |

| Data Element                                                         | Error Message                                                                             | Description                                                                         |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| som:AddPickedLot   cmn:ProductLotNumbers   <b>cmn:LotNumber</b>      | Lot number is required !!!                                                                | The error occurs if the source is empty or null.                                    |
| som:ControlFileHeader                                                | Data Error: ControlFileHeader occurs fewer times than its minimum number of occurrences.  | The error occurs if the source is empty or null.                                    |
| som:MessageBody                                                      | Data Error: MessageBody occurs fewer times than its minimum number of occurrences.        | The error occurs if the source is empty or null.                                    |
| som:OrderDetails                                                     | OrderDetails group is required when AddReceivedItems group is populated !!!               | The error occurs if AddReceivedItems is populated, but the source is empty or null. |
| som:RemoveUnpickedLot   cmn:ProductLotNumbers   <b>choice%1</b>      | Only one of either InternalMaterialCode OR CountryDrugCode is required !!!                | The error occurs if both InternalMaterialCode and CountryDrugCode are populated.    |
| som:RemoveUnpickedLot   cmn:ProductLotNumbers   <b>cmn:LotNumber</b> | Lot number is required !!!                                                                | The error occurs if the source is empty or null.                                    |
| SOMSalesShipmentMessage                                              | Unable to read input data for business object SOMSalesShipmentMessage due to a XML Error. | The error occurs if the source is empty or null.                                    |
| @type                                                                | Valid To BusinessPartyLookupId type is required !!!                                       | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid CarrierBusinessPartyLookupId type is required !!!                                   | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid ShipToLocationInfo/FacilityId type is required !!!                                  | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid ToBusinessPartyInfo/BusinessId type is required !!!                                 | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid ShipFromLocation/FacilityId type is required !!!                                    | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid CarrierBusinessPartyInfo/BusinessId type is required !!!                            | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid FromBusinessPartyInfo/BusinessId type is required !!!                               | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid From BusinessPartyLookupId type is required !!!                                     | The error occurs if source is populated, but there is no entry in Master Data.      |
|                                                                      | Valid type attribute for country drug code is required !!!                                | The error occurs if CountryDrugCode is populated, but source is empty               |

| Data Element                      | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Description                                                                                                                                          |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | or null, or is not a valid value from the enumeration list.                                                                                          |
| <b>Class 2</b>                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |
| AddPickedLot/LotNumber            | Specified Product Code/Lot Numbers include a container to be picked that holds multiple lots where one or more lots are not to be picked. Either disaggregate the container or specify the additional Product Code/Lot Number to be picked.                                                                                                                                                                                                                                                                    | The error occurs if source from AddPickedLots includes a pallet/container that contains multiple lots, but not all lots are included in AddPickLots. |
|                                   | Lot Number <LotNumber> does not exist for Product Code <ProductCode>.                                                                                                                                                                                                                                                                                                                                                                                                                                          | The error occurs if source is invalid.                                                                                                               |
|                                   | Lot Number must specified for Product Code <ProductCode>.                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The error occurs if ProductCode is populated, but the source is empty or null.                                                                       |
| AddPickedLot/ProductCode          | Product Code <ProductCode> does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The error occurs if source is invalid.                                                                                                               |
|                                   | Product Code must be specified for Lot Number <Lot Number>.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The error occurs if LotNumber is populated, but the source is empty or null.                                                                         |
| AddPickedLot/SerialNumber         | Serial Number <Serial> derived from AddPickedLots but not present either in Serialized Operations Manager or in Aggregation Events.                                                                                                                                                                                                                                                                                                                                                                            | The error occurs if source derived from AddPickLots does not exist in Serialized Operations Manager or in any of the aggregation events.             |
| API Key                           | No API Key exists for user <username> of service <servicename>. format(user.getOrDefault("null"),service.serviceName)                                                                                                                                                                                                                                                                                                                                                                                          | The error occurs if no API Key exists for the specified user.                                                                                        |
| bizTransaction   @date            | Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                                                                                                                                                                                                                                                                                                                                                          | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                                     |
| CarrierBusinessPartyLookupId      | Could not perform Company Master Data lookup to populate transportation carrier business address identifier. None of the permitted regulatory identifier types were configured in your Company Master Data. Please configure a COMPANYID, DUNS, GLN, CPF, CNES, CNPJ, BR_PROF_REG, GCP, IN_COMPANY_ID, IN_LOCATION_ID, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <ToBusinessPartyLookupId / type> <ToBusinessPartyLookupId> as appropriate for the requirement of your ship from market, and reprocess the file. | The error occurs if none of the valid regulatory identifier types exist in Master Data.                                                              |
| cmn:FundingSource                 | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU.                                                                                                                                                                                                                                                                                                                                                                                                                     | The error occurs if both cmn:shipToCountryCode and cmn:shipFromCountryCode = "RU", but the source is empty or null.                                  |
| cmn:TransactionIdentifier   @date | Order Item Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                                                                                                                                                                                                                                                                                                                                               | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                                     |
| cmn:UnitPrice                     | Unit Price is required if Ship To Country Code is RU and Ship From                                                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if cmn:ShipToCountryCode = "RU" and                                                                                                 |

| Data Element                                                     | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Description                                                                                                                                             |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                  | Country Code is any of RU, AM, BY, KZ, KG.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | cmn:ShipFromCountryCode = "AM", "BY", "KG", "KZ", or "RU", but the source is empty or null.                                                             |
| FromBusinessParty id                                             | From Business Party SGLN, GLN, DEA or HIN number required, but not found.                                                                                                                                                                                                                                                                                                                                                                                                                                        | The error occurs if the required source is missing or null.                                                                                             |
| FromBusinessPartyLookupId                                        | Could not perform Master Data lookup to populate sender business address identifier. None of the permitted regulatory identifier types were configured in your Company or Partner Company Master Data. Please configure a COMPANYID, DUNS, GLN, CPF, CNES, CNPJ, BR_PROF_REG, GCP, IN_COMPANY_ID, IN_LOCATION_ID, KR_BUS_REG_NUMBER, or KR_PROVIDER_CODE for <FromBusinessPartyLookupId / type> <FromBusinessPartyLookupId> as appropriate for the requirement of your ship from market, and reprocess the file. | The error occurs if none of the valid regulatory identifier types exist in Master Data.                                                                 |
| GLN                                                              | GLN for message sender not found.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The error occurs if source for message sender is not found.                                                                                             |
|                                                                  | GLN for message recipient not found.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if source for message recipient is not found.                                                                                          |
| inFilename, origFilename, origCompanyname, origFileDate, cntrlID | File <inFilename> is a potential duplicate match with file <origFilename> sent from <origFilename> received on <origFileDate>, based on both files having the same File Control Number <cntrlID>.                                                                                                                                                                                                                                                                                                                | The error occurs if file is a duplicate.                                                                                                                |
| Order                                                            | Unable to get Order <n> from Serialized Operations Manager (shipment id)                                                                                                                                                                                                                                                                                                                                                                                                                                         | The error occurs if unable to get source from Serialized Operations Manager.                                                                            |
| OrderDetails/OrderItemList                                       | At least one OrderItem group must be provided for the order.                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The error occurs if ShipFromCountryCode = KR and SalesDistributionType = EXPORTSALE or INCOUNTRYSALE, but source is empty or null.                      |
| OrderDetails/Picked Items OR Picked Lots                         | Delivery <Delivery Number> could not be processed. No picked item or picked lot information found for Delivery <DeliveryNumber>.                                                                                                                                                                                                                                                                                                                                                                                 | The error occurs if there are no Picked Items or Picked Lots in the back end.                                                                           |
| OrderItemQuantity                                                | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, Lot <Lot Number> but <EA Level Serial Number Count> item serial numbers were found.                                                                                                                                                                                                                                                                                                                            | The error occurs if AllowShortVerificationCount = true AND the derived quantity is greater than OrderItemQuantity AND LotNumber is included.            |
|                                                                  | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, but <EA Level Serial Number Count> item serial numbers were found.                                                                                                                                                                                                                                                                                                                                             | The error occurs if AllowShortVerificationCount = true AND the derived quantity is greater than OrderItemQuantity AND LotNumber is <i>not</i> included. |
|                                                                  | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, Lot <Lot Number> but <EA Level Serial Number Count> item serial numbers were found.                                                                                                                                                                                                                                                                                                                            | The error occurs if AllowShortVerificationCount = false AND the derived quantity is greater than OrderItemQuantity AND LotNumber is included.           |

| Data Element                           | Error Message                                                                                                                                                                                                                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, but <EA Level Serial Number Count> item serial numbers were found.                                                                                                              | The error occurs if AllowShortVerificationCount = false AND the derived quantity is greater than OrderItemQuantity AND LotNumber is <i>not</i> included.                                                                                                                                                                                                                                                          |
| PackagingItemCode/InternalMaterialCode | Specified Internal Material Code does not match the Internal Material Code of the serial numbers at commission time.                                                                                                                                                              | The error occurs if source exists in Master Data, but does not match the source that was used to commission the serial numbers.                                                                                                                                                                                                                                                                                   |
| prodCodeType, serialNumber             | Product code type <prodCodeType> on serial number <serialNumber> was not recognized. Only US NDC product codes are supported.                                                                                                                                                     | The error occurs if the product code type on a specified serial number is not recognized.                                                                                                                                                                                                                                                                                                                         |
| product code type                      | invalid product code type: <product code type>                                                                                                                                                                                                                                    | The error occurs if the source is invalid.                                                                                                                                                                                                                                                                                                                                                                        |
| ReceiverInfo                           | Serialized Operations Manager Receipt inbound processing could not be completed. The ReceiverInfo with either ToBusinessPartyLookupId or ToBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified. | The error occurs if <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
|                                        | Serialized Operations Manager Receipt inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified.                                                                    | The error occurs if ReceiverInfo and the source are both empty or null, and both the ShipToCountryCode and ShipFromCountryCode are empty or null.                                                                                                                                                                                                                                                                 |
| RemovePickedLot/LotNumber              | Lot Number <LotNumber> does not exist for Product Code <ProductCode>.                                                                                                                                                                                                             | The error occurs if the source is invalid.                                                                                                                                                                                                                                                                                                                                                                        |
|                                        | Lot Number must specified for Product Code <ProductCode>.                                                                                                                                                                                                                         | The error occurs if ProductCode is populated, but the source is empty or null.                                                                                                                                                                                                                                                                                                                                    |
| RemovePickedLot/ProductCode            | Product Code <ProductCode> does not exist.                                                                                                                                                                                                                                        | The error occurs if the source is invalid.                                                                                                                                                                                                                                                                                                                                                                        |
|                                        | Product Code must be specified for Lot Number <Lot Number>.                                                                                                                                                                                                                       | The error occurs if LotNumber is populated, but the source is empty or null.                                                                                                                                                                                                                                                                                                                                      |
| Retries                                | Retries exceeded the maximum wait time <n> seconds. format (maxSecondsToWait)                                                                                                                                                                                                     | The error occurs if source exceeds maximum wait time in seconds.                                                                                                                                                                                                                                                                                                                                                  |
| SenderInfo                             | Serialized Operations Manager Receipt inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not                                                                               | The error occurs if ReceiverInfo and the source are both empty or null, and both the ShipToCountryCode and ShipFromCountryCode are empty or null.                                                                                                                                                                                                                                                                 |

| Data Element                         | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Description                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      | specified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                      | Serialized Operations Manager Receipt inbound processing could not be completed. The SenderInfo with either FromBusinessPartyLookupId or FromBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode>.                                                                                                                                                                                                                                                    | <p>The error occurs if</p> <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
| SerialNumber, ProductCode, LotNumber | Serial Number <SerialNumber> for Product Code/Lot Number <Product Code>/<Lot Number> can not be specified in both AddPickedItems and AddPickedLots when that serial number is also specified in the Aggregation.                                                                                                                                                                                                                                                                                                     | The error occurs if the SerialNumber from ProductCode/LotNumber derived from AddPickLots is also populated in AddPickedItems and Aggregation.                                                                                                                                                                                                                                                                            |
| SGLN                                 | SGLN for ship from location not found.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The error occurs if source cannot be found.                                                                                                                                                                                                                                                                                                                                                                              |
| Ship From Location                   | Ship From Location was not specified and is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The error occurs if a required field is empty or null.                                                                                                                                                                                                                                                                                                                                                                   |
| Ship To Location                     | Ship To Location was not specified and is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The error occurs if a required field is empty or null.                                                                                                                                                                                                                                                                                                                                                                   |
| ShipFromLocation id                  | Ship From Location SGLN, GLN, DEA or HIN number required, but not found.                                                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if the required source is missing or null.                                                                                                                                                                                                                                                                                                                                                              |
| ShipFromLocationLookupId             | Could not perform Location Master Data lookup to populate the sender shipping address identifier. None of the permitted regulatory identifier types were configured in your Location Master Data. Please configure a COMPANYSITEID, DEA, DUNS4, GLN, HIN, SGLN, CPF, CNES, CNPJ, BR_PROF_REG, HIN, GCP, IN_LOCATION_ID, KR_BUS_REG_NUMBER, or KR_PROVIDER_CODE for <ShipFromLocationLookupId / type> <ShipFromLocationLookupId> as appropriate for the requirement of your ship from market, and reprocess the file. | The error occurs if none of the valid regulatory identifier types exist in Master Data.                                                                                                                                                                                                                                                                                                                                  |
| ShipToLocation id                    | Ship To Location SGLN, GLN, DEA or HIN number required, but not found.                                                                                                                                                                                                                                                                                                                                                                                                                                               | The error occurs if the required source is missing or null.                                                                                                                                                                                                                                                                                                                                                              |
| ShipToLocationLookupId               | Could not perform Location Master Data lookup to populate the receiving address identifier. None of the permitted regulatory identifier types were configured in your Location Master Data. Please configure a COMPANYSITEID, DEA, DUNS4, GLN, HIN, SGLN, CPF, CNES, CNPJ, BR_PROF_REG, HIN, GCP, IN_LOCATION_ID, KR_BUS_REG_NUMBER,                                                                                                                                                                                 | The error occurs if none of the valid regulatory identifier types exist in Master Data.                                                                                                                                                                                                                                                                                                                                  |



| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Description                                                                                                                                                   |
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|                                                                                                                                                                   | or KR_PROVIDER_CODE for <ShipToLocationLookupId / type><br><ShipToLocationLookupId> as appropriate for the requirement of your ship from market, and reprocess the file.                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                               |
| salesDistributionType                                                                                                                                             | Serial Numbers with Recalled status cannot be shipped.                                                                                                                                                                                                                                                                                                                                                                                                                                              | (missing or bad snippet) salesDistrubutionType = INCOUNTRYSALE or EXPORTSALE for sales shipments, but one or more serial numbers have a Recalled reason code. |
| Sold From Party                                                                                                                                                   | Sold From Party was not specified and is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The error occurs if a required field is empty or null.                                                                                                        |
| Sold To Party                                                                                                                                                     | Sold To Party was not specified and is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The error occurs if a required field is empty or null.                                                                                                        |
| ToBusinessParty id                                                                                                                                                | To Business Party SGLN, GLN, DEA or HIN number required, but not found.                                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if the required source is missing or null.                                                                                                   |
| ToBusinessPartyLookupId                                                                                                                                           | Could not perform Company Master Data lookup to populate receiver business address identifier. None of the permitted regulatory identifier types were configured in your Company Master Data. Please configure a COMPANYID, DUNS, GLN, CPF, CNES, CNPJ, BR_PROF_REG, GCP, IN_COMPANY_ID, IN_LOCATION_ID, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <ToBusinessPartyLookupId / type><br><ToBusinessPartyLookupId> as appropriate for the requirement of your ship from market, and reprocess the file. | The error occurs if none of the valid regulatory identifier types exist in Master Data.                                                                       |
| transaction id                                                                                                                                                    | Invalid transaction identifier: PO, ASN, or INVOICE number required.                                                                                                                                                                                                                                                                                                                                                                                                                                | The error occurs if the source is invalid.                                                                                                                    |
| Transaction Type                                                                                                                                                  | Unknown Transaction Type!                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | The error occurs if source is unknown.                                                                                                                        |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                               |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                               |

## Sales Shipment (EPCIS v1.2)

### Guidelines

Use this message when shipping product as a sale (i.e. the shipment is not a transfer or return).

To submit both shipment information and serial numbers in this message, all shipment data must originate from the same system. If shipment information and serial numbers must be submitted separately (e.g. because shipment information is managed in a separate ERP system), use a combination of this

message and the Sales Shipment (XML) message (i.e. submit the Sales Shipment (XML) message containing the shipment information and set the DeliveryComplete flag to "false", and then submit the Sales Shipment (EPCIS v1.2) message containing the bizTransactionID and serial numbers only).



- When product changes ownership from an MAH, or a CMO or 3PL acting on behalf of an MAH, to another entity, an outbound shipment is generated and the serial numbers are put into a **shipped** state.
- When product is moving between locations (i.e. not a change of ownership) working on behalf of an MAH, an inbound shipment is generated and the serial numbers are put into a **pending receipt** state.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 4 hours.

**Message Type:** SOM\_SALES\_SHIPMENT

**Info Exchange Display Name:** Sales Shipment

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Format | Description                                  |
|---------------------|---------------|--------|----------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -      | <b>Required.</b> EPCIS message root element. |

| Data Element |                                     |                    |                 | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|-------------------------------------|--------------------|-----------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | @schemaVersion                      |                    |                 | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              | @creationDate                       |                    |                 | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              | EPCISHeader                         |                    |                 | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              | sbdh:StandardBusinessDocumentHeader |                    |                 | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |                                     | sbdh:HeaderVersion |                 | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |                                     | sbdh:Sender        |                 | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                     |
|              |                                     |                    | sbdh:Identifier | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup> SGLN and all other party types should be sent with GS1 compliant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p> GLNs do not have an urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |                                     |                    | @Authority      | 1...1<br>1/*  | String   | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to GLN for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>5</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                        |
|              |                                     | sbdh:Receiver      |                 | 1...*<br>-    | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>1.2<sup>2</sup>2018-01-31T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |  |  |                             | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|-----------------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | sbdh:Identifier             | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> SGLN and all other party types should be sent with GS1 compliant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLNs do not have an urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String   | <p><b>Required.</b> The receiver identifier type. The <b>Authority</b> was previously expected to be set to <code>GLN</code> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>2</sup></p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                      |
|              |  |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | sbdh:Standard               | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <code>EPCglobal</code> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | sbdh:TypeVersion            | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <code>1.0</code> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | sbdh:InstanceIdentifier     | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | sbdh:Type                   | 1...1<br>0/*  | String   | <b>Required.</b> This element identifies the type of the document. The <b>Type</b> must equal <code>Events</code> . <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | sbdh:CreationDateAndTime    | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <code>Z</code> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <code>Z</code> . <sup>7</sup>                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCglobal<sup>4</sup>1.0<sup>5</sup>201801311745200001<sup>6</sup>Events<sup>7</sup>2018-01-31T22:08:02Z

| Data Element |  |  |  |  |  |  |                       | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|--|-----------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | extension             | 0...1<br>-    | -      | Header extension area with master data attributes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | EPCISMasterData       | 0...1<br>-    | -      | <p>Master data extension header. May contain business and ship party address information.</p> <p><b>i</b> Full GS1 compliance requires that all product and party master data be stored in the EPCIS header extension <b>EPCISMasterData / VocabularyList / Vocabulary / VocabularyElementList / VocabularyElement</b>. It is strongly urged that all product master data for Commissioning and Transformation events be sent in the <b>VocabularyElement</b> within the <b>EPCISMasterData</b> header extension. If there is no partner address data in the header extensions, the identifiers in the Source and Destination lists are used for partner master data lookup by the system.</p> |
|              |  |  |  |  |  |  | VocabularyList        | 1...1<br>-    | -      | <b>Required.</b> The Vocabulary list group of master data elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  |  | Vocabulary            | 0...*<br>-    | -      | <p>Looping vocabulary element with discrete partner master data element groups. Vocabulary occurs only once for all party address info present in the message, if the group is populated.</p> <p><b>Group</b> is optional. If it does not appear in master data header extension, no error will be thrown.</p>                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | @type                 | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if master data elements are present. Vocabulary type identifying location master data elements. Master data type defined by <b>VocabularyElement   @id</b>.</p> <p>Valid value: <code>urn:epcglobal:epcis:vtype:Location</code> = party master data.<sup>1</sup></p> <p><b>i</b> Sold from, ship from, sold to, ship to for the shipping event are all tracked in the header master data. Party data in shipping event is mapped from header master in <b>Vocabulary</b>.</p>                                                                                                                                                                                 |
|              |  |  |  |  |  |  | VocabularyElementList | 0...1<br>-    | -      | List of vocabulary elements that includes all partner master information. Party identifiers and address info are stored in instances of the looping group <b>VocabularyElement</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  | VocabularyElement     | 1...*<br>-    | -      | <p><b>Required.</b> Looping group header for data elements that identify all business party and location master data, including identifiers, identifier types, and address info. <b>VocabularyElement</b> repeats once for each party type:</p> <ul style="list-style-type: none"> <li>Sold/Transfer from business party (Mandatory, if the group is populated).</li> <li>Ship from location (Optional).</li> <li>Sold/Transfer to business party (Mandatory, if the group is populated).</li> <li>Ship to location (Optional).</li> </ul>                                                                                                                                                     |

<sup>1</sup>urn:epcglobal:epcis:vtype:Location

| Data Element |  |  |  |  |  |  |               | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|--|---------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |               |               |        | <p>Master data lookup is supported. If partner master data is available in TraceLink, indicate master data lookup by sending partner identifiers in the <b>sourceList</b> and/or <b>destinationList</b> of the shipping event and DO NOT include address data in any <b>VocabularyElement</b> group.</p> <p>If master data lookup IS NOT intended, send complete address information for at least the sold-from and sold-to partners in the header master data extension. Ship-from and ship-to addresses can also be included.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | @id           | 1...1<br>0/*  | String | <p><b>Required.</b> SGLN or other partner identifier and type for party master data in the <b>VocabularyElement</b>. Must match <b>sourceList</b> or <b>destinationList</b> owning or location party in the shipping event from either:<sup>1</sup></p> <ul style="list-style-type: none"> <li>• <b>//ObjectEvent/extension/sourceList/source</b> (transfer from, carrier)</li> <li>• <b>//ObjectEvent/extension/destinationList/destination</b> (transfer to)</li> </ul> <p>The identifier value is mandatory for regulatory reporting. The identifier type must include a valid urn or http string prefix. Valid prefix formats include:</p> <ul style="list-style-type: none"> <li>• GS1: <code>urn:epc:id:sgln:&lt;CompanyPrefix&gt;.&lt;LocationReference&gt;.&lt;Extension&gt;</code></li> <li>• GS1 USHC:<br/><code>http://epcis.gs1us.org/hc/&lt;identifierType&gt;/loc/&lt;identificationValue&gt;</code></li> <li>• TraceLink:<br/><code>http://epcis.tracelink.com/hc/&lt;identifierType&gt;/loc/&lt;identificationValue&gt;</code></li> </ul> <p>Only SGLNs are supported, not GLNs. Different countries require different values as noted below.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  |  | attribute (1) | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute (2)</b> is present. Looping Name/Value pairs identifying partner address master data elements. This is the value element in the Name/Value pair attribute   <b>@id</b>. Stores master data item value defined by <b>@id</b>.<sup>2</sup></p> <p>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>• Business name - Mandatory if address populated in VocabularyElement.</li> <li>• Business classification - Optional.</li> <li>• Street address 1 - Mandatory if address populated.</li> <li>• Street address 2 - Optional.</li> <li>• City - Mandatory if address populated.</li> <li>• District - Optional.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0<sup>2</sup>Kendall Pharma

| Data Element |  |  |  |  |  |  |     | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|--|--|-----|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |     |               |        | <ul style="list-style-type: none"> <li>State/Province/Region - Mandatory if address populated.</li> <li>Postal code - Optional.</li> <li>Country code - Mandatory if address populated.</li> </ul> <p>Create one instance of the Name/Value pair <b>attribute</b> and <b>@id</b> for each master data element returned.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  |  | @id | 1...1<br>0/*  | String | <p><b>Conditionally required if attribute (1) is populated.</b> Provides the name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using the urn or http prefix. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li><code>urn:epcglobal:cbv:mda#name</code></li> <li><code>urn:epcglobal:cbv:mda#streetAddressOne</code></li> <li><code>urn:epcglobal:cbv:mda#streetAddressTwo</code></li> <li><code>urn:epcglobal:cbv:mda#streetAddressThree</code></li> <li><code>urn:epcglobal:cbv:mda#city</code></li> <li><code>http://epcis.tracelink.com/mda/district</code></li> <li><code>http://epcis.tracelink.com/mda/village</code></li> <li><code>http://epcis.tracelink.com/mda/houseNumber</code></li> <li><code>http://epcis.tracelink.com/mda/township</code></li> <li><code>http://epcis.tracelink.com/mda/corporateFax</code></li> <li><code>urn:epcglobal:cbv:mda#state</code></li> <li><code>urn:epcglobal:cbv:mda#postalCode</code></li> <li><code>urn:epcglobal:cbv:mda#countryCode</code></li> <li><code>http://epcis.tracelink.com/mda/AddressObjectGUID</code></li> <li><code>http://epcis.tracelink.com/mda/HouseGUID</code></li> <li><code>http://epcis.tracelink.com/mda/premisesCode</code></li> <li><code>http://epcis.tracelink.com/mda/taxRegistrationCode</code></li> <li><code>http://epcis.tracelink.com/mda/partyRoleCode</code></li> </ul> <p>See the <a href="#">MDAttributes</a> enumeration list for valid values.</p> |

<sup>1</sup>urn:epcglobal:cbv:mda#name

| Data Element |  |  |  |  |  |  |               | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--|---------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | attribute (2) | 0...*<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute (1)</b> is present. Looping Name/Value pairs identifying additional party identifier elements. This is the value element in the Name/Value pair attribute   <b>@id</b>. Stores additional party identifiers and identifier types defined by <b>@id</b>.<sup>1</sup></p> <p>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>• Additional party identifier - Optional (1 or more supported).</li> <li>• Additional party identifier type - Optional (1 or more supported).</li> </ul> <p>Create one instance of the Name/Value pair <b>attribute</b> and [<b>@id</b>] for each master data element returned. Must send the additional party identifiers in a double attribute combination using the following sequence:</p> <ol style="list-style-type: none"> <li>1. <b>Attribute 1</b> identifies and provides the party identifier value.</li> <li>2. <b>Attribute 2</b> identifies the party identifier type.</li> </ol> <p>For example:</p> <ol style="list-style-type: none"> <li>1. &lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue"&gt;10023141&lt;/attribute&gt;</li> <li>2. &lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode"&gt;DUNS_PLUS_FOUR&lt;/attribute&gt;</li> </ol> <p>OR</p> <ol style="list-style-type: none"> <li>1. &lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifier"&gt;10023141&lt;/attribute&gt;</li> <li>2. &lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifierType"&gt;DUNS4&lt;/attribute&gt;</li> </ol> <div> <p> If this sequence of double attributes is not followed for additional party identifiers, the additional party identifier will <i>not</i> be mapped to the TraceLink system and no error will be thrown.</p> </div> <div> <p> Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>• RU_INN_FOREIGN_ENTITY</li> <li>• RU_INN_INDIV</li> <li>• RU_INN_LOCAL_ENTITY</li> </ul> </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |

<sup>1</sup>10023141



| Data Element |  |                  |                     |  |  |  |     |  | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|------------------|---------------------|--|--|--|-----|--|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                  |                     |  |  |  | @id |  | 1...1<br>0/*  | String   | <p><b>Conditionally required</b> if <b>attribute (2)</b> is populated. Provides the name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using the urn or http prefix. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</a></li> <li><a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</a></li> </ul> <p>See the <a href="#">MDAttributes</a> enumeration list for valid values.</p> |
| EPCISBody    |  |                  |                     |  |  |  |     |  | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  | EventList        |                     |  |  |  |     |  | 1...1<br>-    | -        | <p><b>Required.</b> <b>EventList</b> supports the following events for Serialized Operations Manager Sales Shipment:</p> <ul style="list-style-type: none"> <li><b>AggregationEvent</b> - 0 or more packing aggregations allowed. Optional.</li> <li><b>ObjectEvent Shipping</b> - Only 1 allowed. Mandatory.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  | choice%1         |                     |  |  |  |     |  | 1...1<br>-    | Choice   | <p><b>Required.</b> Only one of the following choice options may be selected in any one loop on <b>EPCISBody/EventList</b>:</p> <ul style="list-style-type: none"> <li><b>ObjectEvent Shipping</b></li> <li><b>AggregationEvent</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  | AggregationEvent |                     |  |  |  |     |  | 0...*<br>-    | -        | <p><b>AggregationEvent</b> is option 2 for the <b>EventList</b> choice for the Aggregation events.<br/><b>EventList = AggregationEvent</b> when all of the following is true:</p> <ul style="list-style-type: none"> <li><b>bizStep</b> = <a href="#">urn:epcglobal:cbv:bizstep:packing</a></li> <li><b>action</b> = <b>ADD</b></li> <li><b>disposition</b> = <a href="#">urn:epcglobal:cbv:disp:in_progress</a></li> </ul>                                                                                                                                                                                                                                                                                                     |
|              |  |                  | eventTime           |  |  |  |     |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |                  | eventTimeZoneOffset |  |  |  |     |  | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |                  | parentID            |  |  |  |     |  | 1...1         | AnyURI   | <b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup><http://epcis.tracelink.com/mda/additionalPartyIdentificationValue><sup>2</sup>2018-01-31T22:08:02Z<sup>3</sup>-04:00<sup>4</sup><urn:epc:id:sgtin:088202.5503022.100000000670> <urn:epc:id:sscc:088202.002000000034> <http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943><http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002>

| Data Element |  |  |  |           | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|-----------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |        | <p>Examples:</p> <ul style="list-style-type: none"> <li>For an item-to-case aggregation, the EPC of the case.</li> <li>For a case-to-pallet aggregation, the EPC of the pallet.</li> </ul> <p>CN EDMC:</p> <ul style="list-style-type: none"> <li>Format: <a href="http://epcis.tracelink.com/obj/cn-edmc/[serial number]">http://epcis.tracelink.com/obj/cn-edmc/[serial number]</a></li> <li>Ex: <a href="http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943">http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943</a></li> </ul> <p>NTIN:</p> <ul style="list-style-type: none"> <li>Format: <a href="http://epcis.tracelink.com/obj/ntin/[company prefix].[item reference].[serial number]">http://epcis.tracelink.com/obj/ntin/[company prefix].[item reference].[serial number]</a></li> <li>Ex: <a href="http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002">http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002</a></li> </ul> <p>SGTIN:</p> <ul style="list-style-type: none"> <li>Format: <a href="urn:epc:id:sgtin:[company prefix].[indicator digit + item reference].[serial number]">urn:epc:id:sgtin:[company prefix].[indicator digit + item reference].[serial number]</a></li> <li>Ex: <a href="urn:epc:id:sgtin:068202.0401034.11220207026272">urn:epc:id:sgtin:068202.0401034.11220207026272</a></li> </ul> <p>SSCC:</p> <ul style="list-style-type: none"> <li>Format: <a href="urn:epc:id:sscc:[company prefix].[extension digit + serial number]">urn:epc:id:sscc:[company prefix].[extension digit + serial number]</a></li> <li>Ex: <a href="urn:epc:id:sscc:030944.10105363280">urn:epc:id:sscc:030944.10105363280</a></li> </ul> |
|              |  |  |  | childEPCs | 1..1<br>-     | -      | <p><b>Required.</b> List of identifiers of the child items in the parent container in EPC Pure Identity URI format.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>For an item-to-case aggregation, the EPCs of the items.</li> <li>For a case-to-pallet aggregation, the EPCs of the cases.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | epc       | 1...*<br>1/*  | String | <p><b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format.<sup>1</sup></p> <p>CN EDMC:</p> <ul style="list-style-type: none"> <li>Format: <a href="http://epcis.tracelink.com/obj/cn-edmc/[serial number]">http://epcis.tracelink.com/obj/cn-edmc/[serial number]</a></li> <li>Ex: <a href="http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943">http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943</a></li> </ul> <p>NTIN:</p> <ul style="list-style-type: none"> <li>Format: <a href="http://epcis.tracelink.com/obj/ntin/[company prefix].[item reference].[serial number]">http://epcis.tracelink.com/obj/ntin/[company prefix].[item reference].[serial number]</a></li> <li>Ex: <a href="http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002">http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup><urn:epc:id:sgtin:088202.5503022.1000000000670> <urn:epc:id:sscc:088202.002000000034> <http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943>  
<http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002>

| Data Element |  |  |  |             |  | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|-------------|--|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |             |  |               |        | SGTIN: <ul style="list-style-type: none"> <li>Format: urn:epc:id:sgtin:[company prefix].[indicator digit + item reference].[serial number]</li> <li>Ex: urn:epc:id:sgtin:068202.0401034.11220207026272</li> </ul> SSCC: <ul style="list-style-type: none"> <li>Format: urn:epc:id:sscc:[company prefix].[extension digit + serial number]</li> <li>Ex: urn:epc:id:sscc:030944.10105363280</li> </ul>                                    |
|              |  |  |  | action      |  | 1...1<br>1/*  | String | <b>Required.</b> The action value must equal <b>ADD</b> for the aggregation event. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | bizStep     |  | 0...1<br>0/*  | AnyURI | The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:packing</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | disposition |  | 0...1<br>0/*  | AnyURI | The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | readPoint   |  | 0...1<br>-    | -      | Refers to the location of where the commissioning event occurred.<br>Structure: <b>urn:epc:id:sgln:&lt;GS1 company prefix&gt;.&lt;locationId&gt;.&lt;subLocationId&gt;</b><br><div>  To represent the facility where the commissioning event occurred, only use the SGLN representation. If no subLocation, third segment = <b>0</b>.         </div> |
|              |  |  |  | id          |  | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>4</sup>                                                                                                                                                                                                                                                                          |
|              |  |  |  | extension   |  | 0...1<br>-    | -      | Not Used - GS1 Reserved.                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | bizLocation |  | 0...1<br>-    | -      | <b>Required.</b> The location where the event occurred.<br><div>  Mandatory for <b>AggregationEvent</b>.         </div>                                                                                                                                                                                                                            |

<sup>1</sup>ADD<sup>2</sup>urn:epcglobal:cbv:bizstep:packing<sup>3</sup>urn:epcglobal:cbv:disp:in\_progress<sup>4</sup>urn:epc:id:sgln:1100001.12345.0

| Data Element |  |  |  |  |                               | Occurs Length | Format  | Description                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|-------------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                            |
|              |  |  |  |  | bizLocationList               | 0...1<br>-    | -       | Not used.                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -       | Extensions used for the Aggregation Event.                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:packedStatus               | 0...1<br>0/*  | String  | Indicates the packaging status of the container (e.g. <code>full</code> , <code>partial</code> ). See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                 |
|              |  |  |  |  | tl:quantity                   | 0...1<br>0/*  | Integer | The quantity of items at the aggregation level.                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | tl:filterValue                | 0...1<br>0/*  | String  | The filter value used in GTN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | tl:packagingLevel             | 0...1<br>0/*  | String  | The packaging level of the commissioned item using the supported enumeration values. <sup>2</sup> See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                                               |
|              |  |  |  |  | tl:epcOrderItemDetails        | 0...1<br>-    | -       | Group header with specific link between <b>tl:orderItemNumber</b> in the <b>ObjectEvent</b> for Shipping Events and the epc serial number.                                                                                                                                                                                |
|              |  |  |  |  | tl:epcOrderItemList           | 1...*<br>-    | -       | Group header.                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | @orderItemNumber              | 0...1<br>0/*  | String  | List of serial numbers associated with the pricing and tax information in the current instance of the <b>ItemOrder</b> .                                                                                                                                                                                                  |
|              |  |  |  |  | tl:epcOrderItem               | 1...*<br>0/*  | String  | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>OrderItem</b> , in EPC Pure Identity URI format.                                                                                                                                  |
|              |  |  |  |  | ObjectEvent                   | 1...1<br>-    | -       | <b>Required. EventList.</b> Data = <b>ObjectEvent</b> for Shipping Events.<br><b>EventList = ObjectEvent</b> Shipping when all of the following is true: <ul style="list-style-type: none"> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:shipping</code></li> <li><b>action</b> = <code>OBSERVE</code></li> </ul> |

<sup>1</sup>urn:epc:id:sgln:1100001.12345.0<sup>2</sup>CA

| Data Element |  |  |                     | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|---------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |          | <ul style="list-style-type: none"> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:in_transit</code></li> </ul>                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in XML datetime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>1</sup>                                                                                                                                                                                                                                                      |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                               |
|              |  |  | epcList             | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of top most containers (e.g. pallets, cases) in the shipment.                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> for formats. <sup>3</sup>                                                                                                                                                                                                                                                                                            |
|              |  |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The action value must equal <code>OBSERVE</code> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The business process. Valid values: <sup>5</sup> <ul style="list-style-type: none"> <li><code>urn:epcglobal:cbv:bizstep:shipping</code> – the shipment is submitted.</li> <li><code>urn:epcglobal:cbv:bizstep:picking</code> – the shipment is unsubmitted. Use this value to allow the shipment to be completed at a later time, such as when all required information is known, or to allow another party to complete the shipment.</li> </ul> |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The current condition of the serial number in relation to the business process. Valid values: <sup>6</sup> <ul style="list-style-type: none"> <li><code>urn:epcglobal:cbv:disp:in_transit</code> – the serial number is in transit.</li> <li><code>urn:epcglobal:cbv:disp:in_progress</code> – the serial number is in an unsubmitted shipment message.</li> </ul>                                                                               |

<sup>1</sup>2018-01-31T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>

urn:epc:id:sgtin:068202.0401034.11220207026272

urn:epc:id:sscc:030944.10105363280

http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943

http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002

<sup>4</sup>OBSERVE<sup>5</sup>urn:epcglobal:cbv:bizstep:shipping<sup>6</sup>urn:epcglobal:cbv:disp:in\_transit

| Data Element |  |  |  |                    | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                    |               |        | <p>❗ The value of disposition depends on the <b>bizStep</b> value:</p> <ul style="list-style-type: none"> <li>If <b>bizStep</b> equals <code>urn:epcglobal:cbv:bizstep:shipping</code>, disposition must equal <code>urn:epcglobal:cbv:disp:in_transit</code>.</li> <li>If <b>bizStep</b> equals <code>urn:epcglobal:cbv:bizstep:picking</code>, disposition must equal <code>urn:epcglobal:cbv:disp:in_progress</code>.</li> </ul>                                                                                                                                 |
|              |  |  |  | readPoint          | 0...1<br>-    | -      | <p><b>Required.</b> Refers to location of where the commissioning event occurred.<br/>Structure: <code>urn:epc:id:sgln:&lt;GS1 company prefix&gt;.&lt;locationId&gt;.&lt;subLocationId&gt;</code></p> <p>❗ To represent the facility where the commissioning event occurred, only use the SGLN representation. If no subLocation, third segment = 0.</p>                                                                                                                                                                                                            |
|              |  |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | bizLocation        | 0...1<br>-    | -      | Not Used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | id                 | 1...1<br>1/*  | AnyURI | <b>Required.</b> Not Used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | bizTransactionList | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:shipping</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | bizTransaction     | 1...*<br>0/*  | AnyURI | <p><b>Required.</b> The business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or Invoice and/or Purchase Order governing this shipment, subject to Section 8.4.2 of [CBV1.0].<sup>2</sup><br/>The GLN that occurs after <code>urn:epcglobal:cbv:bt:</code> is the GLN of the party that issued the number (e.g. if customer issues PO Number, customer GLN is entered. If supplier issues ASN/delivery number, supplier GLN is entered).</p> <p>⚠ A delivery number or ASN is mandatory. All other transaction types are optional.</p> |

<sup>1</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>2</sup>urn:epcglobal:cbv:bt:0614141000029:9847856

| Data Element |  |  |  |           |            | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|-----------|------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           | @type      | 1...1<br>1/*  | String | <p><b>Required.</b> The transaction identifier type.<sup>1</sup></p> <p> A delivery number or ASN is mandatory. All other transaction types are optional.</p> <p> Mandatory if <b>cmn:TransactionIdentifier</b> is populated.</p> <p>See the <a href="#">TransactionId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |           | @date      | 0...1<br>0/*  | Date   | <p><b>Required.</b> The transaction identifier date.<sup>2</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | extension |            | 1...1<br>-    | -      | <p><b>Conditionally required</b> even if party address master data is stored in the <b>VocabularyElement</b> in the <b>EPCISMasterData</b> extension in the message header. Main extension body for shipping event.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |           | sourceList | 0...1<br>-    | -      | <p><b>Required.</b></p> <p>Source list identifies sending business, location, and carrier parties. Source list supports one of two functions:</p> <ol style="list-style-type: none"> <li><b>VocabularyElement</b> is populated with party address master data: <b>sourceList</b> identifies sold-from, ship-from, or carrier party. Party master data is mapped from <b>VocabularyElement</b>.</li> <li><b>VocabularyElement</b> is not populated with party address master data: <b>sourceList</b> party identifiers used for master data lookup in backend.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |           | source     | 1...*<br>0/*  | String | <p><b>Required.</b> Source party identifier for sold-from, ship-from, or carrier parties. Party identifier in source either:<sup>3</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-from, ship-from, or carrier party in populated <b>VocabularyElement</b>. Party address info is mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in <b>sourceList/source</b> and <b>VocabularyElement(@id)</b>.</li> <li><b>sourceList/source</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is not populated or there is no match between party identifiers in source and <b>VocabularyElement(@id)</b>. If ship-from party the same as sold-from party, ship-from identifier does not need to be sent.</li> </ol> <p> If the ship-from party is the same as the sold-from party, the ship-from identifier does not need to be sent.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |

<sup>1</sup>urn:epcglobal:cbv:btt:desadv<sup>2</sup>2019-03-30<sup>3</sup>urn:epc:id:sgln:088202.867701.0

| Data Element |  |  |  |  |                 |             |  | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|-----------------|-------------|--|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                 | @type       |  | 1...1<br>0/*  | String | <p><b>Required.</b> Type of source party identifier (i.e. owning party). Identifies sold-from, ship-from, or carrier (for Brazil) party in header extension <b>VocabularyElement</b> instance. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li>Sold-from party = <code>urn:epcglobal:cbv:sdt:owning_party</code>.</li> <li>Ship-from party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from <b>owning_party</b>).</li> <li>Carrier party = <code>http://epcis.tracelink.com/sdt/carrier_party</code> (for Brazil).</li> </ul> <p> Mandatory if <b>source</b> is populated.</p>                                                                                                                                                                                               |
|              |  |  |  |  | destinationList |             |  | 0...1<br>-    | -      | <p>Destination list identifies receiving business or location parties. Destination list supports one of two functions:</p> <ol style="list-style-type: none"> <li><b>VocabularyElement</b> is populated with party address master data: <b>destinationList</b> identifies sold-to, ship-to parties. Party master data is mapped from <b>VocabularyElement</b>.</li> <li><b>VocabularyElement</b> is not populated with party address master data: <b>destinationList</b> party identifiers used for master data lookup in the backend.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |                 | destination |  | 1...*<br>0/*  | String | <p>Destination party identifier for sold-to or ship-to parties. Party identifier in destination either:<sup>2</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-to or ship-to parties in populated <b>VocabularyElement</b>. Party address info is mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in <b>destinationList/destination</b> and <b>VocabularyElement(@id)</b>.</li> <li><b>destinationList/destination</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is not populated or there is no match between party identifiers in destination and <b>VocabularyElement(@id)</b>.</li> </ol> <p>If ship-to party is the same as sold-to party, ship-to identifier does not need to be sent.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  |  |                 | @type       |  | 1...1<br>0/*  | String | <p><b>Required.</b></p> <p>Identifies type of destination party identifier, i.e. owning (sold-to) or location (ship-to) party. Valid values:<sup>3</sup></p> <ul style="list-style-type: none"> <li>Sold-to party = <code>urn:epcglobal:cbv:sdt:owning_party</code> (conditional).</li> <li>Ship-to party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from <b>owning_party</b>).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>urn:epcglobal:cbv:sdt:owning\_party<sup>2</sup>urn:epc:id:sgln:033333.101365.0<sup>3</sup>urn:epcglobal:cbv:sdt:owning\_party



| Data Element |  |  |  |                            | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|----------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:shippingEventExtensions | 0...1<br>-    | -      | Extensions used for Shipping Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:transactionDate         | 1...1<br>-    | Date   | <b>Required.</b> Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:shipToCountryCode       | 1...1<br>2/2  | String | 2 or 3-letter ISO country code for ship to country. <sup>2</sup><br><br><div> <i>i</i> This value is referenced to advise regulatory reporting if it is mandatory for the specified country market. Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in TraceLink . </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:shipFromCountryCode     | 0...1<br>2/2  | String | <b>Conditionally required</b> if product is being exported from country (e.g. if <b>SalesDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTTRANSFER</b> or <b>EXPORTRETURN</b> ). 2 or 3-letter ISO country code for ship from country. Provides application with the information it needs to trigger regulatory reporting in response to relevant events. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | tl:salesDistributionType   | 1...1<br>1/*  | String | <b>Required.</b> To set this value, compare the ship from country with the ship to country. Valid values: <sup>4</sup> <ul style="list-style-type: none"> <li><b>INCOUNTRYSALE</b>: If ship from country = ship to country (indicates a sale within the same country).</li> <li><b>EXPORTSALE</b>: If ship from country does not equal ship to country (indicates a sale that is an export to another country).</li> <li><b>INCOUNTRYTRANSFER</b>: A transfer within a company or with a partner such as 3PL or contract manufacturer / packager, occurring within the same country.</li> <li><b>EXPORTTRANSFER</b>: A transfer within a company or with a partner such as 3PL or contract manufacturer / packager, made from one country to another.</li> <li><b>INCOUNTRYRETURN</b>: A shipment for a return of goods to the supplier, shipping within the same country.</li> <li><b>EXPORTRETURN</b>: A shipment for a return of goods to the supplier, shipping from one country to another.</li> </ul> <div> <i>i</i> This value is referenced to advise regulatory reporting of exportation, if it is mandatory for the specified </div> |

<sup>1</sup>2018-01-31<sup>2</sup>US<sup>3</sup>US<sup>4</sup>INCOUNTRYSALE

| Data Element |  |  |  |  |                          | Occurs Length | Format  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|--|--------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                          |               |         | <p>country market. Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in TraceLink .</p> <p>See the <a href="#">SalesDistType</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | tl:supplyType            | 0...1<br>0/*  | String  | <p><b>Conditionally required</b> depending on the country. Identifies the type of supply that is being performed using one of the permitted values.<sup>1</sup></p> <p> Country Requirements:</p> <ul style="list-style-type: none"> <li>For Korea: <b>tl:shipToCountryCode</b> = <b>KR</b> and <b>SalesDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b>; All values except for <b>Collection</b> apply.</li> <li>For Brazil: Populate only if performing <b>Collection</b>, <b>Donation</b>, or <b>SampleDistribution</b>.</li> </ul> <p>See the <a href="#">SupplyType</a> enumeration list for valid values.</p> |
|              |  |  |  |  | tl:contractType          | 0...1<br>0/*  | String  | <p><b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> and <b>SalesDistributionType</b> = <b>EXPORTSALE</b> or <b>INCOUNTRYSALE</b>. Identifies if a private or competitive bid contract is used for the sale of goods.</p> <p>See the <a href="#">ContractType</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | tl:dropShipmentIndicator | 0...1<br>0/*  | Boolean | Indicates if shipment is a drop shipment. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:comments              | 0...1<br>0/*  | String  | Optional remarks or comments associated with delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:warehouseOperatorName | 0...1<br>0/*  | String  | Name of the person responsible for warehouse operations. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | tl:correctiveShipment    | 0...1<br>0/*  | String  | <p>Corrective shipment flag is set when shipment is used to replace a previously voided shipment. Valid values:<sup>4</sup></p> <ul style="list-style-type: none"> <li><b>true</b></li> <li><b>false</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>PatientDistribution<sup>2</sup>false<sup>3</sup>John Smith<sup>4</sup>true

| Data Element |  |  |  |                           | Occurs Length  | Format  | Description                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|---------------------------|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:originalDeliveryNumber | 0...1<br>0/*   | String  | <b>Conditionally required</b> if <b>correctiveShipment</b> flag = <b>true</b> . Used to identify previous delivery that was voided and is being replaced by current delivery. <sup>1</sup>                                                                                                 |
|              |  |  |  | tl:disaggregateFromParent | 0...1<br>0/*   | Boolean | When set to <b>true</b> , the system disaggregates the picked serial number from the parent container, if it is aggregated. If not set, or set to <b>false</b> , TraceLink generates an error if attempting to pick serial number for an item or container that is aggregated to a parent. |
|              |  |  |  | tl:contractNumber         | 0...1<br>0/*   | String  | Identification number of the contract. <sup>2</sup>                                                                                                                                                                                                                                        |
|              |  |  |  | tl:fundingSource          | 0...1<br>0/*   | String  | <b>Required.</b> Source of the funding. <sup>3</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                           |
|              |  |  |  | tl:entryPort              | 0...1<br>0/*   | String  | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                   |
|              |  |  |  | tl:exitPort               | 0...1<br>0/*   | String  | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                    |
|              |  |  |  | tl:deliveryInspection     | 0...1<br>0/*   | String  | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                        |
|              |  |  |  | tl:deliveryInspectionDate | 0...1<br>10/10 | Date    | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                         |
|              |  |  |  | tl:deliveryInspectionNote | 0...1<br>0/*   | String  | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                        |
|              |  |  |  | tl:removalFromCirculation | 0...1<br>0/*   | String  | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                  |
|              |  |  |  | tl:aggregationInspection  | 0...1<br>0/*   | String  | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                   |
|              |  |  |  | tl:epcOrderItemDetails    | 0...1<br>-     | -       | Group header with specific link between <b>tl:orderItemNumber</b> in the <b>ObjectEvent</b> for Shipping Events and the epc serial number.                                                                                                                                                 |

<sup>1</sup>H9022413<sup>2</sup>1234567<sup>3</sup>FederalBudgetFunds<sup>4</sup>2021-12-21

| Data Element |  |  |  |  |  |                             | Occurs Length | Format | Description                                                                                                                                                                                                                                                          |
|--------------|--|--|--|--|--|-----------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:epcOrderItemList         | 1...*<br>-    | -      | Group header.                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | @orderItemNumber            | 0...1<br>0/*  | String | List of serial numbers associated with the pricing and tax information in the current instance of the <b>ItemOrder</b> .                                                                                                                                             |
|              |  |  |  |  |  | tl:epcOrderItem             | 1...*<br>0/*  | String | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>OrderItem</b> , in EPC Pure Identity URI format.                                                                             |
|              |  |  |  |  |  | tl:orderItemList            | 0...1<br>-    | -      | Populate <b>orderItemList</b> group to communicate the pick quantities for each item code at the EACH (unit)-level.                                                                                                                                                  |
|              |  |  |  |  |  | tl:orderItem                | 1...*<br>-    | -      | <b>Required.</b> Order item group is a repeating element that captures the item code, lot number, and quantity for each item in the order. Each unique item code and lot number are communicated in a separate order item group.                                     |
|              |  |  |  |  |  | tl:orderItemNumber          | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                                                                           |
|              |  |  |  |  |  | choice%1                    | 1...1<br>-    | Choice | <b>Required.</b> Mandatory choice. Populate only one of the following two options: <ul style="list-style-type: none"> <li>• <b>cmn:InternalMaterialCode</b></li> <li>• <b>cmn:PackagingItemCode</b></li> </ul>                                                       |
|              |  |  |  |  |  | tl:internalMaterialCode     | 0...1<br>1/*  | String | <b>Conditionally required</b> if <b>cmn:PackagingItemCode</b> is not populated. Option 1 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the internal material number configured in Product Master Data. <sup>1</sup>                    |
|              |  |  |  |  |  | tl:packagingItemCode        | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:InternalMaterialCode</b> is not populated. Option 2 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>2</sup> |
|              |  |  |  |  |  | @type                       | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:PackagingItemCode</b> is populated. The product code type for the packaging item code using the supported enumeration values.<br>See the <a href="#">ItemCode</a> enumeration list for valid values.                         |
|              |  |  |  |  |  | cbvmdata:lotNumber          | 0...1<br>0/*  | String | The lot or batch code for the items to be picked (if available) in an alphanumeric string. <sup>3</sup>                                                                                                                                                              |
|              |  |  |  |  |  | cbvmdata:itemExpirationDate | 0...1         | Date   | The expiration date for the serialized item, formatted in YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                            |

<sup>1</sup>100234<sup>2</sup>00882025030223<sup>3</sup>A12345<sup>4</sup>2020-01-31

| Data Element |  |  |  |  |  |  |                          | Occurs Length | Format  | Description                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--|--------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:quantity              | 1...1<br>0/*  | String  | <b>Required.</b> The quantity of items at the EACH (unit)-level of the item code and lot if specified to be picked. Mandatory if <b>ShipFromCountryCode</b> = <b>KR</b> and <b>IsSerialized</b> = <b>false</b> <sup>1</sup> |
|              |  |  |  |  |  |  | tl:unitPrice             | 0...1<br>0/*  | Decimal | <b>Required.</b><br>Unit price of item. <sup>2</sup>                                                                                                                                                                        |
|              |  |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>3</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                       |
|              |  |  |  |  |  |  | tl:vat                   | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>4</sup>                                                                                                                                                                                      |
|              |  |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>5</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                       |
|              |  |  |  |  |  |  | tl:grossPrice            | 0...1<br>0/*  | Decimal | Price including unit price and all taxes and fees. <sup>6</sup>                                                                                                                                                             |
|              |  |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>7</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                       |
|              |  |  |  |  |  |  | tl:isSerialized          | 0...1<br>0/*  | Boolean | Indicates if item is not serialized. Valid values: <sup>8</sup> <ul style="list-style-type: none"> <li><b>true</b> (defaults to true if omitted).</li> <li><b>false</b></li> </ul>                                          |
|              |  |  |  |  |  |  | tl:transactionIdentifier | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present.                                                                                                             |
|              |  |  |  |  |  |  | @type                    | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><b>DESTRUCTION</b></li> </ul>                                                                                        |

<sup>1</sup>50<sup>2</sup>35.67<sup>3</sup>USD<sup>4</sup>152.22<sup>5</sup>USD<sup>6</sup>45.67<sup>7</sup>USD<sup>8</sup>true

| Data Element |  |  |  |  |  |  |       | Occurs Length | Format | Description                                                                                                                        |
|--------------|--|--|--|--|--|--|-------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |       |               |        | <ul style="list-style-type: none"> <li>• INVOICE</li> <li>• NOTAFISCAL</li> <li>• OTHER</li> <li>• PO</li> <li>• RETURN</li> </ul> |
|              |  |  |  |  |  |  | @date | 0...1<br>0/*  | Date   | <b>Required.</b> The transaction identifier date.                                                                                  |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:gslushc="http://epcis.gslus.org/hc/ns" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2018-06-12T06:31:32Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8811891013778</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>201806121745200001</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2018-06-12T06:31:32Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
    <extension>
      <EPCISMasterData>
```

```

<VocabularyList>
  <Vocabulary type="urn:epcglobal:epcis:vtype:Location">
    <VocabularyElementList>
      <!-- SourceList owning_party (sold from business party) -->
      <VocabularyElement id="urn:epc:id:sgln:088202.867701.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">712333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/businessClassification">MANUFACTURER</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
      </VocabularyElement>
      <!-- SourceList location (ship from location) -->
      <VocabularyElement id="urn:epc:id:sgln:9297187.01994.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Wilbur Pharmaceutical Imports</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">412333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">154 Broadway</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Somerville</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>

```

```

        <attribute id="urn:epcglobal:cbv:mda#postalCode">02145</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- DestinationList owning_party (sold to business party) -->
    <VocabularyElement id="urn:epc:id:sgln:8887777.01384.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Watson Rx Wholesaler</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">512333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/businessClassification">WHOLESALE</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">555 Neelan Road</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Sacramento</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">CA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">95833</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- DestinationList location (ship to location) -->
    <VocabularyElement id="http://epcis.gslns.org/hc/dea/loc/512333444">
        <attribute id="urn:epcglobal:cbv:mda#name">Watson Rx Wholesaler</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">512333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/businessClassification">WHOLESALE</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">555 Neelan Road</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Sacramento</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>

```



```

        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">CA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">95833</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
<!-- SourceList location (Carrier Party) -->
<VocabularyElement id="urn:epc:id:sgln:064202.867703.0">
    <attribute id="urn:epcglobal:cbv:mda#name">FedEx</attribute>
    <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">180 Fedex Road</attribute>
    <attribute id="urn:epcglobal:cbv:mda#streetAddressTwo">Building 6B</attribute>
    <attribute id="urn:epcglobal:cbv:mda#city">Atlanta</attribute>
    <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/district">456</attribute>
    <attribute id="urn:epcglobal:cbv:mda#state">GA</attribute>
    <attribute id="urn:epcglobal:cbv:mda#postalCode">31305</attribute>
    <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
    <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
</VocabularyElement>
</VocabularyElementList>
</Vocabulary>
</VocabularyList>
</EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <AggregationEvent>
            <eventTime>2018-06-12T06:31:32Z</eventTime>
            <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
            <parentID>urn:epc:id:sscc:005434.40000000019</parentID>
            <childEPCs>

```

```

        <epc>urn:epc:id:sgtin:068202.0401034.11220207026272</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026273</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026274</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026275</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:9297187.01994.0</id>
    </bizLocation>
    <tl:aggregationEventExtensions>
        <tl:epcOrderItemDetails>
            <tl:epcOrderItemList orderItemNumber="910">
                <tl:epcOrderItem>urn:epc:id:sscc:005434.40000000019</tl:epcOrderItem>
            </tl:epcOrderItemList>
        </tl:epcOrderItemDetails>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2018-06-12T06:31:32Z</eventTime>
    <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:005434.40000000020</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024592</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024593</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024594</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024595</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:9297187.01994.0</id>
    </bizLocation>
    <tl:aggregationEventExtensions>
        <tl:epcOrderItemDetails>
            <tl:epcOrderItemList orderItemNumber="910">
                <tl:epcOrderItem>urn:epc:id:sscc:005434.40000000020</tl:epcOrderItem>
            </tl:epcOrderItemList>

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        </tl:epcOrderItemDetails>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<AggregationEvent>
    <eventTime>2018-06-12T06:31:32Z</eventTime>
    <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:005434.40000000021</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024596</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024597</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:9297187.01994.0</id>
    </bizLocation>
    <tl:aggregationEventExtensions>
        <tl:epcOrderItemDetails>
            <tl:epcOrderItemList orderItemNumber="910">
                <tl:epcOrderItem>urn:epc:id:sscc:005434.40000000021</tl:epcOrderItem>
            </tl:epcOrderItemList>
        </tl:epcOrderItemDetails>
    </tl:aggregationEventExtensions>
</AggregationEvent>
<!-- Shipping -->
<ObjectEvent>
    <eventTime>2018-06-12T06:31:32Z</eventTime>
    <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
    <epcList>
        <epc>urn:epc:id:sscc:005434.40000000021</epc>
    </epcList>
    <action>OBSERVE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:shipping</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_transit</disposition>
    <readPoint>
        <id>urn:epc:id:sgln:9997777.01994.0</id>
    </readPoint>
    <bizTransactionList>
        <bizTransaction type="urn:epcglobal:cbv:btt:desadv" date="2018-06-

```

```

12">urn:epcglobal:cbv:bt:8779891013658:H9022413</bizTransaction>
    <bizTransaction type="urn:epcglobal:cbv:btt:po" date="2018-06-
12">urn:epcglobal:cbv:bt:8811891013778:PO654321</bizTransaction>
    </bizTransactionList>
    <extension>
      <sourceList>
        <!-- owning_party = from business party -->
        <source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:088202.867701.0</source>
        <!-- location = Ship from location -->
        <source type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:9297187.01994.0</source>
        <!-- carrier_party = Transportation carrier -->
        <source type="http://epcis.tracelink.com/sdt/carrier_
party">urn:epc:id:sgln:064202.867703.0</source>
      </sourceList>
      <destinationList>
        <!-- owning_party = to business party -->
        <destination type="urn:epcglobal:cbv:sdt:owning_
party">urn:epc:id:sgln:8887777.01384.0</destination>
        <!-- location = Ship to location -->
        <destination
type="urn:epcglobal:cbv:sdt:location">http://epcis.gs1us.org/hc/dea/loc/512333444</destination>
      </destinationList>
    </extension>
    <tl:shippingEventExtensions>
      <tl:transactionDate>2018-06-12</tl:transactionDate>
      <tl:shipToCountryCode>US</tl:shipToCountryCode>
      <tl:salesDistributionType>INCOUNTRYSALE</tl:salesDistributionType>
      <tl:supplyType>MedicalCareDistribution</tl:supplyType>
      <tl:contractType>CompetitiveBid</tl:contractType>
      <tl:dropShipmentIndicator>false</tl:dropShipmentIndicator>
      <tl:comments>Special shipment handling</tl:comments>
      <tl:contractNumber>C102</tl:contractNumber>
      <tl:fundingSource>OwnFunds</tl:fundingSource>
      <tl:entryPort></tl:entryPort>
      <tl:exitPort></tl:exitPort>
      <tl:epcOrderItemDetails>
        <tl:epcOrderItemList orderItemNumber="910">
          <tl:epcOrderItem>urn:epc:id:sscc:005434.400000000019</tl:epcOrderItem>
          <tl:epcOrderItem>urn:epc:id:sscc:005434.400000000020</tl:epcOrderItem>
          <tl:epcOrderItem>urn:epc:id:sscc:005434.400000000021</tl:epcOrderItem>

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        </tl:epcOrderItemList>
    </tl:epcOrderItemDetails>
    <tl:orderItemList>
        <tl:orderItem>
            <tl:orderItemNumber>910</tl:orderItemNumber>
            <tl:packagingItemCode type="GTIN-14">00992326050107</tl:packagingItemCode>
            <cbvmda:itemExpirationDate>2020-06-12</cbvmda:itemExpirationDate>
            <tl:quantity>5</tl:quantity>
            <tl:unitPrice currencyCode="USD">50.43</tl:unitPrice>
            <tl:vat currencyCode="USD">50.00</tl:vat>
            <tl:grossPrice currencyCode="USD">100.43</tl:grossPrice>
            <tl:transactionIdentifier type="PO" date="2018-06-12">P097</tl:transactionIdentifier>
        </tl:orderItem>
    </tl:orderItemList>
    </tl:shippingEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                          | Error Message                                                                           | Description                                                                                                                                                                                        |
|---------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                        |                                                                                         |                                                                                                                                                                                                    |
| AggregationEvent   <b>bizStep</b>     | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!      | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing" for an Aggregation Event.                                                                                        |
| AggregationEvent   <b>disposition</b> | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress" for an Aggregation Event.                                                                                       |
| bizLocation   <b>id</b>               | Event location in the aggregation event is required !!!                                 | The error occurs if the source is empty or null.                                                                                                                                                   |
| bizTransactionList                    | Biz transaction list is required in shipping event !!!                                  | The error occurs if the source is empty or null.                                                                                                                                                   |
| bizTransaction   <b>@type</b>         | Valid bizTransaction type is required if bizTransaction is populated !!!                | The error occurs if bizTransaction is populated, but the source is empty or null.                                                                                                                  |
| childEPCs   <b>epc</b>                | Invalid EPC format !!!                                                                  | The error occurs if the source value could not be translated to GS1 Application Identifier format without parenthesis, or if the source has any other content than; SGTIN, SSCC, CN EDMC, or NTIN. |

| Data Element                                       | Error Message                                                                          | Description                                                                                                                                                                                       |
|----------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| choice%1                                           | At least one object for shipping is required !!!                                       | The error occurs if no object event is present.                                                                                                                                                   |
| @currencyCode                                      | Valid ISO currency code is required !!!                                                | The error occurs if tl:unitPrice is populated, but the source is missing or null, or if there is no matching entry in the lookup file.                                                            |
| destinationList                                    | Destination list is required !!!                                                       | The error occurs if the source is empty or null.                                                                                                                                                  |
| destinationList   <b>destination</b>               | Sold-to party identifier is required !!!                                               | The error occurs if the source is empty or null.                                                                                                                                                  |
|                                                    | Valid sold-to business lookup identifier type is required !!!                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                     |
|                                                    | Ship-to party identifier must match an identifier in VocabularyElement [@id] !!!       | The error occurs if no match is found between sourceList(source) and VocabularyElement(@id) in party master data header when party master address data is populated in header.                    |
|                                                    | Valid ship-to business lookup identifier type is required !!!                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                     |
| epcList   <b>epc</b>                               | Invalid EPC format !!!                                                                 | The error occurs if the source value could not be translated to GS1 Application Identifier format without parenthesis, or if the source has any other content than SGTIN, SSCC, CN EDMC, or NTIN. |
|                                                    | At least one serial number in epcList is required !!!                                  | The error occurs if tl:shippingEventExtensions   tl:orderItemList   tl:orderItem   <b>tl:isSerialized</b> = true or and the source is missing or null.                                            |
| ObjectEvent                                        | Only one shipping event is required !!!                                                | The error occurs if more than one shipping event is present.                                                                                                                                      |
|                                                    | Shipping event data is required !!! At least one object for shipping is required !!!   | The error occurs if shipping event is not populated in the source.                                                                                                                                |
| ObjectEvent (Shipping Events)   <b>bizStep</b>     | bizStep urn:epcglobal:cbv:bizstep:shipping is required for ObjectEvent shipping !!!    | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:shipping" for an Aggregation Event.                                                                                      |
| ObjectEvent (Shipping Events)   <b>disposition</b> | Disposition urn:epcglobal:cbv:disp:in_transit is required for ObjectEvent shipping !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_transit" for an Aggregation Event.                                                                                       |
| parentID                                           | Invalid EPC format !!!                                                                 | The error occurs if the source value could not be translated to GS1 Application Identifier format without parenthesis, or if the source has any other content than SGTIN, SSCC, CN EDMC, or NTIN. |
| sbdh:Identifier                                    | System will return error if source missing.                                            | The error occurs if the source is empty or null.                                                                                                                                                  |
| sbdh:InstanceIdentifier                            | System will return error if source missing.                                            | The error occurs if the source is empty or null.                                                                                                                                                  |

| Data Element                        | Error Message                                                                     | Description                                                                                                                                                                                    |
|-------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| sourceList                          | Source list is required !!!                                                       | The error occurs if the source is empty or null.                                                                                                                                               |
| sourceList   <b>source</b>          | Sold-from party identifier is required !!!                                        | The error occurs if the source is empty or null.                                                                                                                                               |
|                                     | Valid carrier business lookup identifier type is required !!!                     | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                  |
|                                     | Carrier party identifier must match an identifier in VocabularyElement [@id] !!!  | The error occurs if no match is found between sourceList   <b>source</b> and VocabularyElement   <b>@id</b> in party master data header when party master address data is populated in header. |
|                                     | Valid ship-from business lookup identifier type is required !!!                   | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                  |
|                                     | Ship-from party identifier must match an identifier in VocabularyElement(@id) !!! | The error occurs if no match is found between sourceList   <b>source</b> and VocabularyElement   <b>@id</b> in party master data header when party master address data is populated in header. |
|                                     | Valid sold-from business lookup identifier type is required !!!                   | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                  |
| tl:internalMaterialCode             | One of internalMaterialCode or packagingItemCode is required !!!                  | The error occurs if both tl:internalMaterialCode and tl:packagingItemCode are missing or null.                                                                                                 |
| tl:packagingItemCode                | One of internalMaterialCode or packagingItemCode is required !!!                  | The error occurs if both tl:internalMaterialCode and tl:packagingItemCode are missing or null.                                                                                                 |
| tl:packagingItemCode   <b>@type</b> | Packaging item code type is required !!!                                          | The error occurs if tl:packagingItemCode is populated, but the source is missing or null, or if there is no matching entry in the lookup file.                                                 |
| tl:quantity                         | Quantity value greater than 0 is required !!!                                     | The error occurs if the source is empty or null.                                                                                                                                               |
| tl:salesDistributionType            | Valid sales distributionType is required !!!                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                  |
| tl:shipFromCountryCode              | Valid ISO country code is required !!!                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                  |
|                                     | Ship from country for export products is required !!!                             | The error occurs if the source is empty or null.                                                                                                                                               |
| tl:shippingEventExtensions          | shippingEventExtensions required if shipping event populated !!!                  | The error occurs if ObjectEvent is populated, but the source is empty or null.                                                                                                                 |
| tl:shipToCountryCode                | Valid ISO country code for ship-to country is required !!!                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                  |

| Data Element                         | Error Message                                                                      | Description                                                                                              |
|--------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| tl:supplyType                        | Valid supply type code is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| VocabularyElement                    | Carrier party info required in VocabularyElement if present in sourceList !!!      | The error occurs if carrier party is present in sourceList, but is missing in the source.                |
| VocabularyElement                    | Ship from party info required in VocabularyElement if present in sourceList !!!    | The error occurs if ship from is present in sourceList, but is missing in the source.                    |
| VocabularyElement                    | Ship to party info required in VocabularyElement if present in destinationList !!! | The error occurs if ship to is present in destinationList, but is missing in the source.                 |
| VocabularyElement   <b>attribute</b> | Ship to location state or region is required !!!                                   | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Ship from location country is required !!!                                         | The error occurs if the required source is missing or null.                                              |
| VocabularyElement   <b>attribute</b> | Valid Ship from location country is required !!!                                   | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| VocabularyElement   <b>attribute</b> | Sold to business party name is required !!!                                        | The error occurs if VocabularyElement/attribute fields are populated, but the source is missing or null. |
| VocabularyElement   <b>attribute</b> | Valid business classification code is required !!!                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| VocabularyElement   <b>attribute</b> | Sold to business party street address is required !!!                              | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Sold to business party state or region is required !!!                             | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Sold to business party country is required !!!                                     | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Valid Sold to business party country is required !!!                               | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| VocabularyElement   <b>attribute</b> | Ship from location state or region is required !!!                                 | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Ship to business party name is required !!!                                        | The error occurs if VocabularyElement/attribute fields are populated, but the source is missing or null. |
| VocabularyElement   <b>attribute</b> | Ship to location city is required !!!                                              | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Ship to location country is required !!!                                           | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Valid Ship to location country is required !!!                                     | The error occurs if the source is present, but there is no matching entry in the lookup file.            |



| Data Element                         | Error Message                                                  | Description                                                                                              |
|--------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| VocabularyElement   <b>attribute</b> | Carrier business party name is required !!!                    | The error occurs if VocabularyElement/attribute fields are populated, but the source is missing or null. |
| VocabularyElement   <b>attribute</b> | Carrier business party street address is required !!!          | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Carrier business party city is required !!!                    | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Carrier business party state or region is required !!!         | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Carrier business party country is required !!!                 | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Valid Carrier business party country is required !!!           | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| VocabularyElement   <b>attribute</b> | Ship to location street address is required !!!                | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Sold to business party city is required !!!                    | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Ship from location street address is required !!!              | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Sold from business party city is required !!!                  | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Sold from business party state or region is required !!!       | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Sold from business party country is required !!!               | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Valid business classification code is required !!!             | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| VocabularyElement   <b>attribute</b> | Valid Sold from business party country is required !!!         | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| VocabularyElement   <b>attribute</b> | Sold from business party name is required !!!                  | The error occurs if VocabularyElement/attribute fields are populated, but the source is missing or null. |
| VocabularyElement   <b>attribute</b> | Sold from business party street address is required !!!        | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Ship from location city is required !!!                        | The error occurs if the source is empty or null.                                                         |
| VocabularyElement   <b>attribute</b> | Ship from business party name is required !!!                  | The error occurs if VocabularyElement/attribute fields are populated, but the source is missing or null. |
| VocabularyElement   <b>@id</b>       | Valid sold from business party identifier type is required !!! | The error occurs if the source is present, but there is no matching entry in the lookup file.            |

| Data Element            | Error Message                                                         | Description                                                                                                       |
|-------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| VocabularyElement   @id | If source not present, system will throw validation error.            | The error occurs if the source is empty or null.                                                                  |
| VocabularyElement   @id | Valid carrier business party identifier type is required !!!          | The error occurs if the source is present, but there is no matching entry in the lookup file.                     |
| VocabularyElement   @id | GLN party type not supported. SGLN is required !!!                    | The error occurs if the source is a GLN and not SGLN.                                                             |
| VocabularyElement   @id | If source not present, system will throw validation error.            | The error occurs if the required source is missing or null.                                                       |
| VocabularyElement   @id | Sold from party identifier is required !!!                            | The error occurs if Vocabulary   @type = "urn:epcglobal:epcis:vtype:Location", but the source is missing or null. |
| VocabularyElement   @id | If source not present, system will throw validation error.            | The error occurs if the source is empty or null.                                                                  |
| VocabularyElement   @id | Valid ship to business party identifier type is required !!!          | The error occurs if the source is present, but there is no matching entry in the lookup file.                     |
| VocabularyElement   @id | GLN party type not supported. SGLN is required !!!                    | The error occurs if the source is a GLN and not SGLN.                                                             |
| VocabularyElement   @id | If source not present, system will throw validation error.            | The error occurs if the source is empty or null.                                                                  |
| VocabularyElement   @id | Valid ship from business party identifier type is required !!!        | The error occurs if the source is present, but there is no matching entry in the lookup file.                     |
| VocabularyElement   @id | GLN party type not supported. SGLN is required !!!                    | The error occurs if the source is a GLN and not SGLN.                                                             |
| VocabularyElement   @id | Sold to party identifier is required !!!                              | The error occurs if sold to party does not exist in the source.                                                   |
| VocabularyElement   @id | GLN party type not supported. SGLN is required !!!                    | The error occurs if the source is a GLN and not SGLN.                                                             |
| VocabularyElement   @id | If source not present, system will throw validation error.            | The error occurs if the source is empty or null.                                                                  |
| VocabularyElement   @id | If source not present, system will throw validation error.            | The error occurs if the source is empty or null.                                                                  |
| VocabularyElement   @id | If source not present, system will throw validation error.            | The error occurs if the source is empty or null.                                                                  |
| VocabularyElement   @id | Valid sold to business party identifier type is required !!!          | The error occurs if the source is present, but there is no matching entry in the lookup file.                     |
| <b>Class 2</b>          |                                                                       |                                                                                                                   |
| bizTransaction   @date  | Transaction Identifier Date is required if Ship To Country Code = RU. | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                  |
| ReceiverInfo            | Serialized Operations Manager Receipt inbound processing could not be | The error occurs if                                                                                               |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   | completed. The ReceiverInfo with either ToBusinessPartyLookupId or ToBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified.                                                       | <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul>                            |
| ReceiverInfo                                                                                                                                                      | Serialized Operations Manager Receipt inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified.                                                    | The error occurs if ReceiverInfo and SenderInfo are both empty or null, and both the ShipToCountryCode and ShipFromCountryCode are empty or null.                                                                                                                                                                                                                                                                        |
| SenderInfo                                                                                                                                                        | Serialized Operations Manager Receipt inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified.                                                    | The error occurs if ReceiverInfo and SenderInfo are both empty or null, and both the ShipToCountryCode and ShipFromCountryCode are empty or null.                                                                                                                                                                                                                                                                        |
|                                                                                                                                                                   | Serialized Operations Manager Receipt inbound processing could not be completed. The SenderInfo with either FromBusinessPartyLookupId or FromBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode>. | <p>The error occurs if</p> <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
| tl:fundingSource                                                                                                                                                  | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU.                                                                                                                                                                        | The error occurs if both tl:shipToCountryCode and tl:shipFromCountryCode = "RU", but the source is empty or null.                                                                                                                                                                                                                                                                                                        |
| tl:transactionIdentifier   @date                                                                                                                                  | Order Item Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                                                                                                  | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                                                                                                                                                                                                                                                                                                         |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                          |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                          |

# Shipment Event (EPCIS v1.2)

## Guidelines

Use this message for any type of shipment (i.e. sale, transfer, or return) that is sent from a trade partner to the Serialized Operations Manager Owner. This message can contain optional commissioning, aggregation, decommissioning, and destruction data, in addition to the required shipping data.

 When product changes ownership (e.g. an MAH sells product to a distributor), an inbound shipment is generated and the serial numbers are put into a **pending receipt** state.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

### Message Types:

- SOM\_SHIPMENT\_EVENT
- SOM\_SHIPMENT\_EVENT\_IB

### Info Exchange Display Name: Received Shipment Event

 When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

 NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        |                                     |                    | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|-------------------------------------|--------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument |                                     |                    | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                     | @schemaVersion                      |                    | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                     | @creationDate                       |                    | 1...1<br>1/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the Z to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the Z. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                     | EPCISHeader                         |                    | 0...1<br>-    | -        | <b>Required.</b> XML file control header . This message supports the following use cases: <ul style="list-style-type: none"> <li>Shipping event only: Commission and aggregation transactions have already been processed.</li> <li>Aggregation + Shipping events: Commission events have already been processed.</li> <li>Aggregation + Shipping + Decommission/Destroy events: Commission events have already been processed.</li> <li>Commission + Shipping events: Product is not aggregated.</li> <li>Commission + Aggregation + Shipping events: All events reported at same time from external system.</li> <li>Commission + Shipping + Decommission/Destroy events: Product is not aggregated.</li> <li>Commission + Aggregation + Shipping + Decommission/Destroy events: All events reported at same time from external system.</li> <li>Shipping + Decommission/Destroy events: Commission and Aggregation transaction have already been processed.</li> </ul> Shipping event is required, all other events are optional. |
|                     | sbdh:StandardBusinessDocumentHeader |                    | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                     |                                     | sbdh:HeaderVersion | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                     |                                     | sbdh:Sender        | 1...<br>*     | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>1.2<sup>2</sup>2016-12-18T22:08:02Z<sup>3</sup>1.0

| Data Element |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|-----------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | sbdh:Identifier             | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLN will not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>2</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | sbdh:Receiver               | 1...*<br>-    | -      | <p><b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.</p>                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | sbdh:Identifier             | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>3</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLN will not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String | <p><b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>4</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -      | <p><b>Required.</b></p> <p>Contains the identification group for the message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>1100001014507<sup>2</sup>SGLN<sup>3</sup>1100001014507<sup>4</sup>SGLN

| Data Element |  |  |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--------------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | sbdh:Standard            | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> The document type. The <b>sbdh:Type</b> value is set to <b>Events</b> for a shipment event. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                                              |
|              |  |  | extension                | 0...1<br>-    | -        | Header extension area with master data attributes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | EPCISMasterData          | 0...1<br>-    | -        | Master data extension header. May contain product master data attributes for Commissioning event and/or business and ship party address information.<br><br><b>i</b> Full GS1 conformance requires that all product and party master data be stored in the EPCIS header extension <b>EPCISMasterData</b>   <b>VocabularyList</b>   <b>Vocabulary</b>   <b>VocabularyElementList</b>   <b>VocabularyElement</b> . It is strongly urged that all product master data for Commissioning and Transformation events be sent in the <b>VocabularyElement</b> within the <b>EPCISMasterData</b> header extension. |
|              |  |  | VocabularyList           | 1...1<br>-    | -        | <b>Required.</b> Vocabulary list group master data elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | Vocabulary               | -<br>-        | -        | Looping vocabulary element with discrete item master and/or party master data element groups. <b>Vocabulary</b> occurs only once for all item master entries and party address info present in message, if the group is populated. Group is optional. If it does not appear in master data header extension, no error will be thrown.                                                                                                                                                                                                                                                                      |
|              |  |  | @type                    | -             | -        | <b>Conditionally required</b> if master data elements are present. Vocabulary type identifying product master data elements. Product                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>EPCglobal<sup>2</sup>1.0<sup>3</sup>201609201745200001<sup>4</sup>Events<sup>5</sup>2016-12-18T22:08:02Z

| Data Element |  |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|--|--|--|-----------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                       |               |        | master data is defined by VocabularyElement   @id.<br>Valid value: <code>urn:epcglobal:epcis:vtype:EPCClass</code> = product master data. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | VocabularyElementList | 0...1<br>-    | -      | List of vocabulary elements containing master data attributes for each unique product code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  |  | VocabularyElement     | 0...*<br>-    | -      | <p>Looping vocabulary element identifying each unique SGTIN, NTIN, or China Product Code for product master data embedded in the epc serial number in the Commissioning and Transformation events.<br/>SSCC codes are not included in <b>VocabularyElement</b> product master data.</p> <div> <p><b>i</b> To conform with GS1 standards, master data attributes should be sent in the <b>VocabularyElement</b>. Each unique SGTIN, NTIN, or China Product Code embedded in Commissioning event epcList/epc and Transformation event outputEPC/epc serial numbers should be sent in one instance of <b>VocabularyElement</b>.</p> </div>                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  |  | @id                   | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies the product code for which master data is being sent in the <b>VocabularyElement</b> loop. VocabularyElement   @id = SGTIN, NTIN, or China Product Code. These are the only values supported in this element. All other product identifier types will be sent as additional trade item types. SSCC codes are not identified in any part of the <b>VocabularyElement</b> group.<sup>2</sup><br/>Must match the product code embedded within the serial number in the epc code in one or more commissioning events or the outputEPCList/epc in one or more transformation events.</p> <p>SGTIN</p> <ul style="list-style-type: none"> <li>Prefix: <code>urn:epc:idpat:sgtin:</code></li> <li>Example: <code>urn:epc:idpat:sgtin:0030001.0012345.*</code></li> </ul> <div> <p><b>i</b> Legacy http prefix will continue to be supported: Legacy: <code>http://epcis.tracelink.com/obj/[ProductType]/</code></p> </div> |
|              |  |  |  |  |  |  | attribute             | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if item master data attributes sent in <b>VocabularyElement</b>. Instance 1 of attribute for packaging level value identified by attribute   @id.<sup>3</sup><br/>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  |  | @id                   | 1...1<br>0/*  | String | <p><b>Required.</b> Attribute identifying packaging level.<br/>Valid value: <code>http://epcis.tracelink.com/mda/packageTypeCode</code><sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>urn:epcglobal:epcis:vtype:EPCClass<sup>2</sup>urn:epc:idpat:sgtin:0030001.0012345.\*<sup>3</sup>UN<sup>4</sup>http://epcis.tracelink.com/mda/packageTypeCode



| Data Element |  |  |  |  |  |  |  |           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--|--|--|-----------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | Instance 2 of attribute for internal material number in Pharmaceutical Manufacturer's internal system identified by attribute   @id. Identified by the value in attribute element (instance 3) in the current loop = <code>MANUFACTURER_PART_NUMBER</code> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code.<br>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code> <sup>2</sup><br>See the <a href="#">MDAAttributes</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | <b>Conditionally required</b> if the previous name/value pair attribute   @id (instance 2) is populated. Instance 3 of attribute for internal material number identifier type for the product. Id attribute identifying internal material code.<br>Valid value: <code>MANUFACTURER_PART_NUMBER</code> <sup>3</sup><br>Sequence of fields for internal material number is:<br><br><ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;100335&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;MANUFACTURER_PART_NUMBER&lt;/attribute&gt;</code></li> </ol> <div>  If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown. </div> <div>  Mandatory if the previous name/value pair attribute   @id (instance 2) is populated. </div> |
|              |  |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code.<br>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code> <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | Instance 4 of attribute for country drug code for all national drug code types, identified by the enum value in the next <b>attribute</b> element (instance 5) in the current loop and by the <b>attribute</b> @id value as an additional trade item. <sup>5</sup><br>Country drug code type defined by value in next attribute element (instance 5) where attribute   @id = <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code> OR <code>http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>100335<sup>2</sup>`urn:epcglobal:cbv:mda#additionalTradeItemIdentification`<sup>3</sup>`MANUFACTURER_PART_NUMBER`<sup>4</sup>`urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode`<sup>5</sup>82025030221

| Data Element |  |  |  |  |  |  |  |           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--|--|--|-----------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code.<br>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code> <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute   <b>@id</b> (instance 4) is populated. Instance 5 of attribute for Country drug code identifier type. Must follow attribute with country drug value. Id attribute identifying internal material code.<sup>2</sup><br/>Sequence of fields for country drug code is:</p> <p>GS1:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;FDA_NDC_11&lt;/attribute&gt;</code></li> </ol> <p>TraceLink:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode"&gt;US_NDC442&lt;/attribute&gt;</code></li> </ol> <div> <p> If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown.</p> </div> <p>The following qualifiers have been defined by GS1 as additional trade item types:</p> <ul style="list-style-type: none"> <li><code>MANUFACTURER_PART_NUMBER</code> = Internal material number</li> <li><code>FDA_NDC_11</code> = US NDC542</li> <li><code>DIN</code> = Canada Drug ID Number</li> <li><code>PHARMACODE_CH</code> = Swiss Pharma Code</li> <li><code>NAN</code> = Nordic Article Number</li> </ul> <p>To identify these material number types, use attribute   <b>@id string</b>:<br/><code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode.</code></p> |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification<sup>2</sup>FDA\_NDC\_11

| Data Element |  |  |  |  |  |                       |  |  |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|--|--|-----------------------|--|--|-----|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                       |  |  |     |               |        | For all other country drug code types, use attribute   <b>@id string</b> : <a href="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</a> .<br>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  |                       |  |  | @id | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code. Valid values: <sup>1</sup> <ul style="list-style-type: none"><li><a href="#">urn:epcglobal:cbv:mda#additionalTradeItemIdentification</a> (GS1 enums).</li><li><a href="http://epcis.tracelink.com/mda/packageTypeCode">http://epcis.tracelink.com/mda/packageTypeCode</a> (TraceLink enums).</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | Vocabulary            |  |  |     | 0...*<br>-    | -      | <p>Looping vocabulary with discrete master data element groups. <b>Vocabulary</b> will occur once each for sold from, ship from, sold to, and ship to parties.</p> <div> Group is optional. If it does not appear in master data header extension, no error will be thrown.</div>                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  | @type                 |  |  |     | 1...1<br>0/*  | String | <p><b>Required.</b> Vocabulary type identifying location master data elements. Master data type defined by VocabularyElement   <b>@id</b>. Valid value: <a href="#">urn:epcglobal:epcis:vtype:Location</a> = party master data<sup>2</sup></p> <div> Sold from, ship from, sold to, and ship to for shipping event are all tracked in header master data. Party data in Shipping event is mapped from header master in Vocabulary.</div>                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | VocabularyElementList |  |  |     | 0...1<br>-    | -      | List of vocabulary elements that includes all partner master information. Party identifiers and address info are stored in instances of the looping group <b>VocabularyElement</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | VocabularyElement     |  |  |     | 1...*<br>-    | -      | <p><b>Required.</b> Looping group header for data elements that identify all business party and location master data, including identifiers, identifier types, and address info.</p> <p>Shipping Event:</p> <ul style="list-style-type: none"><li>Sold/Transfer from business party (Mandatory if group populated)</li><li>Ship from location (Optional)</li><li>Sold/Transfer to business party (Mandatory if group populated)</li><li>Ship to location (Optional)</li></ul> <p>Master data lookup is supported. If partner master data is available in TraceLink, indicate master data lookup by sending partner identifiers in the <b>sourceList</b> and/or <b>destinationList</b> for the shipping event and do not include address data in any <b>VocabularyElement</b> group.</p> |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification<sup>2</sup>urn:epcglobal:epcis:vtype:Location

| Data Element |  |  |  |  |  |              |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|--|--------------|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |              |  |               |        | <p>Master data lookup is supported from the readPoint   <b>id</b> for the decommissioning and destroying events if <b>VocabularyElement</b> is not populated with location address.</p> <p>If master data lookup is not intended, send complete address information for at least the sold-from and sold-to partners in the header master data extension. Ship-from and ship-to addresses can also be included.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | @id          |  | 1...1<br>0/*  | String | <p><b>Required.</b> SGLN or other partner identifier and type for party master data in <b>VocabularyElement</b>. Must match <b>sourceList</b> or <b>destinationList</b> owning or location party in shipping event from:<sup>1</sup></p> <ul style="list-style-type: none"> <li>ObjectEvent   extension   sourceList   <b>source</b> (transfer from, carrier) or</li> <li>ObjectEvent   extension   destinationList   <b>destination</b> (transfer to)</li> </ul> <p>The identifier value is mandatory for regulatory reporting. The identifier type must include a valid urn or http string prefix. Valid prefix format include by namespace:</p> <ul style="list-style-type: none"> <li>TraceLink: <a href="http://epcis.tracelink.com/hc/[identifierType]/loc/[identificationValue]">http://epcis.tracelink.com/hc/[identifierType]/loc/[identificationValue]</a></li> </ul> <p>Only SGLN is supported—not GLN. Different countries require different values as noted below:<br/>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | attribute(1) |  | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute(2)</b> is present. Looping Name/Value pairs identifying partner address master data elements. This is the value element in the Name/Value pair attribute   <b>@id</b>. Stores master data item value defined by attribute   <b>@id</b>. Partner master data items currently supported:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Business name – Mandatory if address populated in <b>VocabularyElement</b>.</li> <li>Business classification – Optional.</li> <li>Street address 1 – Mandatory if address populated.</li> <li>Street address 2 – Optional.</li> <li>City – Mandatory if address populated.</li> <li>District – Optional</li> <li>Village – Optional.</li> <li>House number – Optional.</li> <li>Township – Optional.</li> <li>Corporate Fax – Optional.</li> <li>State/Province/Region – Mandatory if address populated.</li> </ul>                                                                                                                                                       |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0<sup>2</sup>Kendall Pharma

| Data Element |  |  |  |  |  |  |  |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--|--|-----|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  |     |               |        | <ul style="list-style-type: none"> <li>Postal code – Optional.</li> <li>Country code – Mandatory if address populated.</li> <li>Premises code – Optional.</li> <li>Tax registration code – Optional.</li> </ul> <p>Create one instance of the Name/Value pair attribute and attribute   <b>@id</b> for each master data element returned.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  |  |  | @id | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute(1)</b> is populated. Provides the name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using urn or http prefix. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li><code>urn:epcglobal:cbv:mda#name</code></li> <li><code>urn:epcglobal:cbv:mda#streetAddressOne</code></li> <li><code>urn:epcglobal:cbv:mda#streetAddressTwo</code></li> <li><code>urn:epcglobal:cbv:mda#streetAddressThree</code></li> <li><code>urn:epcglobal:cbv:mda#city</code></li> <li><code>http://epcis.tracelink.com/mda/district</code></li> <li><code>http://epcis.tracelink.com/mda/village</code></li> <li><code>http://epcis.tracelink.com/mda/houseNumber</code></li> <li><code>http://epcis.tracelink.com/mda/township</code></li> <li><code>http://epcis.tracelink.com/mda/corporateFax</code></li> <li><code>urn:epcglobal:cbv:mda#state</code></li> <li><code>urn:epcglobal:cbv:mda#postalCode</code></li> <li><code>urn:epcglobal:cbv:mda#countryCode</code></li> <li><code>http://epcis.tracelink.com/mda/AddressObjectGUID</code></li> <li><code>http://epcis.tracelink.com/mda/HouseGUID</code></li> <li><code>http://epcis.tracelink.com/mda/partyRoleCode</code></li> <li><code>http://epcis.tracelink.com/mda/premisesCode</code></li> <li><code>http://epcis.tracelink.com/mda/taxRegistrationCode</code></li> </ul> |

<sup>1</sup>urn:epcglobal:cbv:mda#name

| Data Element |  |  |  |  |  |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--|--|--------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | attribute(2) | 1...10/*      | String | <p><b>Conditionally required</b> if <b>attribute(1)</b> is present. Looping Name/Value pairs identifying additional party identifier elements. This is the value element in the Name/Value pair attribute   <b>@id</b>. Stores additional party identifiers and identifier types defined by <b>@id</b>.<sup>1</sup></p> <p>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>Additional party identifier - Optional (1 or more supported).</li> <li>Additional party identifier type - Optional (1 or more supported).</li> </ul> <p>Create one instance of the Name/Value pair <b>attribute</b> and attribute   <b>@id</b> for each master data element returned.</p> <p>Additional party identifiers must be sent in a double attribute combination. The sequence must be:</p> <ul style="list-style-type: none"> <li>Attribute 1 identifies and provides the party identifier value.</li> <li>Attribute 2 identifies the party identifier type.</li> </ul> <p>For example:</p> <ul style="list-style-type: none"> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue"&gt;10023141&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode"&gt;DUNS_PLUS_FOUR&lt;/attribute&gt;</code> or</li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifier"&gt;10023141&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifierType"&gt;DUNS4&lt;/attribute&gt;</code></li> </ul> <div> <p>❗ If this sequence of double attributes is not followed for additional party identifiers, the additional party identifier will not be mapped to the TraceLink system and no error will be thrown.</p> <p>❗ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |

<sup>1</sup>10023141

| Data Element |  |           |  |  |  |  |  |  |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|-----------|--|--|--|--|--|--|-----|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |           |  |  |  |  |  |  | @id | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute(2)</b> is populated. Provides the name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using urn or http prefix. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</a></li> <li><a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</a></li> </ul>                                                                                                         |
| EPCISBody    |  |           |  |  |  |  |  |  |     | 1...1<br>-    | -      | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  | EventList |  |  |  |  |  |  |     | 1...1<br>-    | -      | <p><b>Required.</b>The <b>EventList</b> has the following structure:</p> <ul style="list-style-type: none"> <li><b>AggregationEvent</b> (0 or more for aggregation)</li> <li><b>ObjectEvent</b> (0 or more for commissioning)</li> <li><b>ObjectEvent</b> (0 or more for decommissioning)</li> <li><b>ObjectEvent</b> (0 or more for destroying)</li> <li><b>ObjectEvent</b> (one for shipping)</li> </ul> <p>Order of events in message if all events are present:</p> <ol style="list-style-type: none"> <li>Commission (optional)</li> <li>Decommission (optional)</li> <li>Destroy (optional)</li> <li>Aggregation (optional)</li> <li>Shipping (mandatory)</li> </ol> <div> <i>i</i> Order of events is not enforced by schema.         </div> |
|              |  | choice%1  |  |  |  |  |  |  |     | 1...<br>*     | -      | <p><b>Required.</b> Only one of the following choice options may be selected in any one loop on EPCISBody   <b>EventList</b>:</p> <ul style="list-style-type: none"> <li><b>AggregationEvent</b></li> <li><b>ObjectEvent</b> (with commissioning extensions)</li> <li><b>ObjectEvent</b> (with decommissioning extensions)</li> <li><b>ObjectEvent</b> (with destroying extensions)</li> <li><b>ObjectEvent</b> (with shipping extensions)</li> </ul>                                                                                                                                                                                                                                                                                               |

<sup>1</sup><http://epcis.tracelink.com/mda/additionalPartyIdentificationValue>

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|---------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |          | <ul style="list-style-type: none"> <li>TransformationEvent</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | ObjectEvent         | 0...*<br>-    | -        | <p>Choice 1 for <b>EventList</b>. Data = <b>ObjectEvent</b> for the Commissioning Events.<br/> <b>EventList</b> = <b>ObjectEvent</b> Commissioning when all of the following is true:</p> <ul style="list-style-type: none"> <li>action = <b>ADD</b></li> <li>bizStep = <b>urn:epcglobal:cbv:bizstep:commissioning</b></li> <li>disposition = <b>urn:epcglobal:cbv:disp:active</b></li> </ul>                                                                                          |
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <p><b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1].<sup>1</sup></p> <div>  The Event Time must be indicated in seconds. Default milliseconds to "0". This results in efficiency gains and smaller file sizes because serial numbers can be grouped together when the event times are the same. </div> |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <p><b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b>. Per Section 7.2.8 of [EPCIS1.0.1].<sup>2</sup></p>                                                                                                                                                                                                                                                                               |
|              |  |  | epcList             | 1...1<br>-    | -        | <p><b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.</p>                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | epc                 | 1...*<br>1/*  | String   | <p><b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a>.</p>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | action              | 1...1<br>0/*  | String   | <p><b>Required.</b> The <b>action</b> value must equal <b>ADD</b>.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <p><b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:commissioning</b>.<sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI   | <p><b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:active</b>.<sup>5</sup></p>                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | readPoint           | 0...1         | -        | <p>Read point is optional for a commissioning event.</p>                                                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>2016-10-01T22:08:02.0Z<sup>2</sup>-04:00<sup>3</sup>ADD<sup>4</sup>urn:epcglobal:cbv:bizstep:commissioning<sup>5</sup>urn:epcglobal:cbv:disp:active



| Data Element |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|------------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | id                           | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                                                                              |
|              |  |  |  |  | bizLocation                  | 1...1<br>-    | -       | <b>Required.</b> Business location is mandatory for a commissioning event.                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | id                           | 1...1<br>1/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>2</sup>                                                                                                                                                                                                              |
|              |  |  |  |  | extension                    | 0...1<br>-    | -       | Main extension body for commission event.                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  | ilmd                         | 0...1<br>-    | -       | Instance lot master data specific to product being commissioned.                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | cbvmdata:lotNumber           | 0...1<br>0/*  | String  | The lot or batch code for the serialized item in an alphanumeric String of up to 20 characters. <sup>3</sup>                                                                                                                                                                                                                                                                |
|              |  |  |  |  | cbvmdata:itemExpirationDate  | 0...1<br>0/*  | Date    | The expiration date for the serialized item in YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  | tl:commissionEventExtensions | 0...1<br>-    | -       | Extensions used for Commission <b>ObjectEvent</b> .                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:filterValue               | 0...1<br>-    | Integer | <b>tl:filterValue</b> is used only if it is required by a trade partner to convert SSCC to GS1 HEX or Tag URI format. See the <a href="#">FilterValue</a> enumeration list for valid values.                                                                                                                                                                                |
|              |  |  |  |  | tl:packagingLevel            | 0...1<br>0/*  | String  | <p>The packaging level of the commissioned item.<sup>5</sup></p> <div> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. homogeneous pallet).</p> </div> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p> |

<sup>1</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>2</sup>urn:epc:id:sgln:0614141.12345.1400<sup>3</sup>ABC123<sup>4</sup>2017-12-31<sup>5</sup>CA

| Data Element |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|-------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:epcAttributes        | 0...*<br>-    | -      | Supports optional inclusion of human readable barcode content associated with each epc number in a commission event.<br><br><div> <i>i</i> Included only if provided in original commission event. </div>                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | @epc                    | 1...1<br>1/*  | String | <b>Conditionally required.</b> The EPC serial number to which the barcodeContent is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5]. <sup>1</sup> <ul style="list-style-type: none"> <li>Case: SGTIN or SSCC</li> <li>Item: SGTIN</li> <li>Pallet: SSCC</li> </ul>                                                                                                                                                                                                                                             |
|              |  |  |  |  | tl:barcodeContent       | 1...1<br>1/*  | String | <b>Required.</b> The human readable barcode contents encoded in the 2D barcode WITH parentheses for the AI keys. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | tl:plantLocationId      | 0...1<br>0/*  | String | Identifier of plant where products were commissioned. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | tl:productionLineId     | 0...1<br>1/*  | String | Identifier of production line where products were commissioned. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  | tl:lineManagerName      | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | tl:internalMaterialCode | 0...1<br>0/*  | String | Internal material number for the product in the brand owner's internal systems (e.g. ERP). <sup>6</sup> <div> <i>i</i> See the following additional information: <ul style="list-style-type: none"> <li>To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> Master Data, unless the current item has an SSCC code with associated product master data.</li> <li>The message may include either <b>tl:internalMaterialCode</b>, <b>tl:countryDrugCode</b>, or both, but all packaging levels must be consistent.</li> </ul> </div> |

<sup>1</sup>urn:epc:id:sgtin:068202.0401034.11220207026272<sup>2</sup>(01)50682020401034(21)11220207026272(17)170731(10)A312101(7004)0120<sup>3</sup>0614141.12345.1400<sup>4</sup>PW003<sup>5</sup>John Smith<sup>6</sup>100234

| Data Element |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|--|-----------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:packagingItemCode  | 0...1<br>0/*  | String | The product code for the commissioned item (e.g. GTIN-14). <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | @type                 | 1...1<br>1/*  | String | <b>Required.</b> The product code type. Valid values: <sup>2</sup> <ul style="list-style-type: none"> <li>• <a href="#">CN-RESCODE</a></li> <li>• <a href="#">GTIN-14</a></li> <li>• <a href="#">NTIN</a></li> </ul>                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:countryDrugCode    | 0...1<br>0/*  | String | The national drug code for the commissioned item (e.g. NDC number for US products). <sup>3</sup> <div> <i>ⓘ</i> See the following additional information:           <ul style="list-style-type: none"> <li>• To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> Master Data, unless the current item has an SSCC code with associated product master data.</li> <li>• The message may include either <b>tl:internalMaterialCode</b>, <b>tl:countryDrugCode</b>, or both, but all packaging levels must be consistent.</li> </ul> </div> |
|              |  |  |  |  |  | @type                 | 0...1<br>0/*  | String | <b>Required.</b> The national drug code type using the supported enumeration values and any formatting instructions provided. <div> <i>ⓘ</i> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. homogeneous pallet).           </div> See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                            |
|              |  |  |  |  |  | tl:manufacturingDate  | 0...1<br>0/10 | Date   | The date of manufacture for the serialized item, in YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:referenceDocuments | 0...*<br>-    | -      | Reference document identifier associated with the commissioning activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | tl:poNumber           | 0...1<br>0/*  | String | PO Number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>50300694220667<sup>2</sup>GTIN-14<sup>3</sup>0069-4220-66<sup>4</sup>2016-12-18

| Data Element |  |  |  |  |  |                        | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|--|------------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:poLine              | 0...1<br>0/*  | String   | PO Line number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:workOrderNumber     | 0...1<br>0/*  | String   | Work Order number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:referenceIdentifier | 0...1<br>0/*  | String   | Reference identifier (e.g. any type of identifier) associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  | tl:extensionField      | 0...*<br>-    | -        | <p>Customer extension point to pass in 1 or more name/value pairs containing additional data attributes not already supported in this message. If this element group is populated, both <b>tl:fieldName</b> and <b>tl:fieldValue</b> must be populated.</p> <p> These extensions are not stored by TraceLink and are used only for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message, such as when a CMO is required to provide additional data fields to the brand owner. In this case, TraceLink would have a custom map for that trade partner to map these fields outbound. Different trade partners may have different field requirements and may therefore require that <b>tl:extensionField</b> be populated differently per trade partner.</p> |
|              |  |  |  |  |  | tl:fieldName           | 1...1<br>1/*  | String   | <b>Required.</b> Populate with the field name provided by the trade partner that will be receiving the mapped outbound message. The field name must match the field name provided by the trade partner exactly, including case, so it is properly detected in the outbound mapping.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | tl:fieldValue          | 1...1<br>1/*  | String   | <b>Required.</b> Populate with the field value content that corresponds to <b>tl:fieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | ObjectEvent            | 0...*<br>-    | -        | <p><b>ObjectEvent</b> describing decommissioning events.</p> <p><b>EventList = ObjectEvent</b> Decommissioning when all of the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = <code>DELETE</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:decommissioning</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:inactive</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | eventTime              | 1...1<br>1/*  | DateTime | <p><b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in YYYY-MM-DDTHH:MM:SS.mmZ format.<sup>1</sup></p> <p> The Event Time must be indicated in seconds. Default milliseconds to "0". This results in efficiency gains and smaller file sizes because serial numbers can be grouped together when the event times are the same.</p>                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>2017-01-30T08:30:21.0Z

| Data Element |  |  |                     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|---------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>1</sup>                                                                       |
|              |  |  | epcList             | 1...1<br>-    | -      | <b>Required.</b> The EPCs of each item, case, and/or pallet decommissioned.                                                                                                                                                                                               |
|              |  |  | epc                 | 1...*<br>1/*  | String | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> .                                                                                                                                            |
|              |  |  | action              | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must equal <b>DELETE</b> . <sup>2</sup>                                                                                                                                                                                          |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:decommissioning</b> . <sup>3</sup>                                                                                                                                                      |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:inactive</b> . <sup>4</sup>                                                                                                                                                            |
|              |  |  | readPoint           | 0...1<br>-    | -      | The location where the event occurred; that is, the warehouse SGLN location ID and storage location (e.g. shelf, bin) in URN format, that recorded the object event.                                                                                                      |
|              |  |  | id                  | 1...1<br>0/*  | AnyURI | <b>Required.</b> The party identifier of the location where the decommissioning event occurred. SGLN is strongly preferred for GS1 conformance. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup><br>Valid value: <b>urn:epc:id:sgln:</b> |
|              |  |  | bizTransactionList  | 0...1<br>-    | -      | <b>Required.</b> Business transaction list group.                                                                                                                                                                                                                         |
|              |  |  | bizTransaction      | 1...*<br>0/*  | AnyURI | <b>Required.</b> The transaction identifier associated with the decommissioned product. <sup>6</sup>                                                                                                                                                                      |
|              |  |  | @type               | 1...1<br>1/*  | String | <b>Required.</b><br>The transaction identifier type. Valid values:<br><ul style="list-style-type: none"> <li><b>http://epcis.tracelink.com/hc/btt/destruction</b></li> </ul>                                                                                              |

<sup>1</sup>04:00<sup>2</sup>DELETE<sup>3</sup>urn:epcglobal:cbv:bizstep:decommissioning<sup>4</sup>urn:epcglobal:cbv:disp:inactive<sup>5</sup>urn:epc:id:sgln:0614141.12345.1400<sup>6</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016

| Data Element |  |  |  |  |                                | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--------------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                                |               |         | <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul> <p> If at least one Target Market in Product Master Data = RU one instance of bizTransaction   @type with a value of <a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a> must be present.</p> |
|              |  |  |  |  | @date                          | 0...1<br>0/*  | Date    | <b>Required.</b> Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | locationId                     | 0...1<br>-    | String  | Serialized Operations Manager External Partner Location identifier. Type of identifier defined by @type enum below. <sup>2</sup><br>When messages are submitted by an external Serialized Operations Manager Partner, the system uses the Partner company integration user to perform the action and log this in the audit trail so that all transactions executed by the external Serialized Operations Manager Partner are attributed to that company.                                                                                                    |
|              |  |  |  |  | @type                          | 1...1<br>1/*  | String  | <b>Required.</b> Attribute identifies the location types. See the <a href="#">LocationIdType</a> enumeration list for valid values. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:decommissionEventExtensions | 0...1<br>-    | -       | Extensions used for <b>ObjectEvent</b> Decommissioning.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | tl:transactionDate             | 0...1<br>0/*  | Date    | Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | tl:disaggregateFromParent      | 0...1<br>-    | Boolean | When set to <b>true</b> instructs backend to disaggregate a serial number from its parent container (if it is aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> . <sup>5</sup><br>If not set, or set to <b>false</b> , the back end operates in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container. If source is not populated, target defaults to <b>false</b> .                         |
|              |  |  |  |  | tl:marketCountryCode           | 0...1<br>0/2  | String  | Market country code. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | tl:businessPartyInfo           | 0...1<br>-    | -       | The full business information (e.g. business type, contact information) associated with the business entity that authorized the decommissioning of the serial numbers.                                                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup>2019-04-01<sup>2</sup>8888882028677<sup>3</sup>GLN<sup>4</sup>2017-01-31<sup>5</sup>false<sup>6</sup>US

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:businessId             | 1...*<br>1/*  | String | <b>Required.</b> The identifier associated with the business entity that authorized the decommissioning of the serial number(s). <sup>1</sup>                                                                                               |
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b> The business identifier type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                          |
|              |  |  |  |  | tl:businessClassification | 0...1<br>0/*  | String | The classification of the business.<br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                    |
|              |  |  |  |  | tl:BusinessPartyDetail    | 1...1<br>-    | -      | <b>Required.</b> The business name and address of the business entity that authorized the decommissioning of the serial numbers).                                                                                                           |
|              |  |  |  |  | tl:businessName           | 1...1<br>1/*  | String | <b>Required.</b> The business name of the entity that authorized the decommissioning of the serial numbers. <sup>2</sup>                                                                                                                    |
|              |  |  |  |  | tl:street1                | 1...1<br>1/*  | String | <b>Required.</b> The first line of the address for the company indicated in <b>tl:businessName</b> . <sup>3</sup>                                                                                                                           |
|              |  |  |  |  | tl:street2                | 0...1<br>0/*  | String | The second line of the address for the company indicated in <b>tl:businessName</b> . <sup>4</sup>                                                                                                                                           |
|              |  |  |  |  | tl:city                   | 1...1<br>1/*  | String | <b>Required.</b> The city for the company indicated in <b>tl:businessName</b> . <sup>5</sup>                                                                                                                                                |
|              |  |  |  |  | tl:village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                        |
|              |  |  |  |  | tl:houseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> . |
|              |  |  |  |  | tl:township               | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                       |
|              |  |  |  |  | tl:district               | 0...1<br>0/*  | String | District Code only for India.                                                                                                                                                                                                               |

<sup>1</sup>8888882028677<sup>2</sup>Kendall Pharma<sup>3</sup>300 Trade Center<sup>4</sup>Suite 7690<sup>5</sup>Woburn

| Data Element |  |  |  |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--|--|--------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                          |               |        | <div> <i>i</i> Must be a 3-digit numeric code. </div>                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:stateOrRegion         | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region of the business entity indicated in <b>tl:businessName</b> , using the standard two-letter abbreviation specified in the ISO 3166-2:1998 country subdivision code. <sup>1</sup>                                                                   |
|              |  |  |  |  |  | tl:postalCode            | 0...1<br>1/*  | String | The postal code for the company indicated in <b>tl:businessName</b> . <sup>2</sup>                                                                                                                                                                                                                |
|              |  |  |  |  |  | tl:country               | 1...1<br>1/*  | String | <b>Required.</b> The country where the company indicated in <b>tl:businessName</b> is located. The country uses the standard two-letter abbreviation specified in the ISO 3166-1alpha-2:1997 country code. <sup>3</sup><br>See the <a href="#">CountryCode</a> enumeration list for valid values. |
|              |  |  |  |  |  | tl:corporateFax          | 0...1<br>1/*  | String | Company fax number.                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | tl:addressObjectGUID     | 0...1<br>0/36 | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <sup>4</sup><br><div> <i>i</i> Maximum of 36 characters, using the digits 0-9 and letters A-F </div>                                                                                                  |
|              |  |  |  |  |  | tl:houseGUID             | 0...1<br>0/36 | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS). <sup>5</sup><br><div> <i>i</i> Maximum of 36 characters, using the digits 0-9 and letters A-F </div>                                                                                            |
|              |  |  |  |  |  | tl:taxRegistrationCode   | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                            |
|              |  |  |  |  |  | tl:premisesCode          | 0...1<br>0/*  | String | Internal identifier a company uses for a specific location. For example, a company with 4 locations in the city of Mumbai that internally refers to the 4th location as MUM4.                                                                                                                     |
|              |  |  |  |  |  | tl:warehouseOperatorName | 0...1<br>0/*  | String | Name of the person responsible for warehouse operations. <sup>6</sup>                                                                                                                                                                                                                             |

<sup>1</sup>MA<sup>2</sup>01801<sup>3</sup>US<sup>4</sup>19406454-0022-000C-00B0-000000000152<sup>5</sup>986f2934-be05-438f-A30E-c15b90e15dbc<sup>6</sup>John Smith



| Data Element |  |  |  |                           | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|---------------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:correctiveShipment     | 0...1<br>0/*  | Boolean  | Indicates that a new Serialized Operations Manager receipt is correcting a previously voided Serialized Operations Manager receipt. Valid values: <ul style="list-style-type: none"> <li><b>false</b> – (default) The receipt is not a corrective receipt.</li> <li><b>true</b> – The receipt is a corrective receipt.</li> </ul>                                                                                                                                                                                           |
|              |  |  |  | tl:originalDeliveryNumber | 0...1<br>0/*  | String   | Original delivery number. Records the original delivery number that is replaced when a receipt is voided and corrections are made to that receipt.                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | tl:decommissionReasonCode | 0...1<br>0/*  | String   | <b>Required.</b> Reason code for decommissioning. <sup>1</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:reasonDescription      | 0...1<br>0/*  | String   | Description for decommission reason code. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | tl:destructionMethod      | 0...1<br>0/*  | String   | <b>Required..</b> Method of destruction. <sup>3</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | ObjectEvent               | 0...*         | -        | <b>ObjectEvent</b> describing destroying events.<br><b>EventList = ObjectEvent</b> Destroy when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <b>DELETE</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:destroying</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:destroyed</b></li> </ul>                                                                                                                                                                   |
|              |  |  |  | eventTime                 | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in YYYY-MM-DDTHH:MM:SS.mmZ format. <sup>4</sup><br><br><div>  The Event Time must be indicated in seconds. Default milliseconds to "0". This results in efficiency gains and smaller file sizes because serial numbers can be grouped together when the event times are the same. </div> |
|              |  |  |  | eventTimeZoneOffset       | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>5</sup>                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>PRODUCTION\_DEFECT<sup>2</sup>Defect from production<sup>3</sup>LIQUID\_DILUTION\_DRAINAGE<sup>4</sup>2017-01-30T08:30:21.0Z<sup>5</sup>-04:00

| Data Element |  |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | epcList            | 1...1<br>-    | -      | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                                                                                                                                                       |
|              |  |  |  |  | epc                | 1...*<br>1/*  | String | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> .                                                                                                                                                                  |
|              |  |  |  |  | action             | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must equal <code>DELETE</code> . <sup>1</sup>                                                                                                                                                                                                          |
|              |  |  |  |  | bizStep            | 0...1<br>0/*  | AnyURI | The <b>bizStep</b> value must equal <code>urn:epcglobal:cbv:bizstep:destroying</code> . <sup>2</sup>                                                                                                                                                                                            |
|              |  |  |  |  | disposition        | 0...1<br>0/*  | AnyURI | The <b>disposition</b> value must equal <code>urn:epcglobal:cbv:disp:destroyed</code> . <sup>3</sup>                                                                                                                                                                                            |
|              |  |  |  |  | readPoint          | 0...1<br>-    | -      | Location where event occurred. Defined with GS1-conformant party identifier types with full urn or http prefix.                                                                                                                                                                                 |
|              |  |  |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The party identifier of the location where the destroying event occurred. <sup>4</sup><br>Valid value: <code>urn:epc:id:sgln:</code>                                                                                                                                           |
|              |  |  |  |  | bizTransactionList | 0...1<br>-    | -      | <b>Required.</b> Business transaction list group.                                                                                                                                                                                                                                               |
|              |  |  |  |  | bizTransaction     | 1...*<br>0/*  | AnyURI | <b>Required.</b> The transaction identifier associated with the destroyed product. <sup>5</sup>                                                                                                                                                                                                 |
|              |  |  |  |  | @type              | 1...1<br>1/*  | String | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><code>http://epcis.tracelink.com/hc/btt/destruction</code></li> <li><code>http://epcis.tracelink.com/hc/btt/removal</code></li> <li><code>urn:epcglobal:cbv:btt:rma</code></li> </ul> |

<sup>1</sup>DELETE<sup>2</sup>urn:epcglobal:cbv:bizstep:decommissioning<sup>3</sup>urn:epcglobal:cbv:disp:inactive<sup>4</sup>urn:epc:id:sgln:0614141.12345.1400<sup>5</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016

| Data Element |  |  |                           |       |  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|---------------------------|-------|--|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                           |       |  |               |         |  If at least one Target Market in Product Master Data = RU once instance of bizTransaction   @type with a value of <a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a> must be present.                                                                                                                                                                                                                 |
|              |  |  |                           | @date |  | 0...1<br>0/*  | Date    | <b>Required.</b> Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | tl:locationId             |       |  | 0...1<br>-    | String  | Serialized Operations Manager External Partner Location identifier. When messages are submitted by an external Serialized Operations Manager Partner, the system uses the partner company integration user to perform the action. This is logged in the audit trail so that all messages executed by the external Serialized Operations Manager Partner are attributed to that company. <sup>2</sup>                                                                                                                                   |
|              |  |  | @type                     |       |  | 1...1<br>1/*  | String  | <b>Required.</b> Attribute identifies the location types. <sup>3</sup><br>See the <a href="#">MessagePartyIDType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | tl:destroyEventExtensions |       |  | 0...1<br>-    | -       | Extensions used for <b>ObjectEvent</b> Destroying.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | tl:transactionDate        |       |  | 0...1<br>0/*  | Date    | Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | tl:disaggregateFromParent |       |  | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs back end to disaggregate a serial number from its parent container (if it is aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> . <sup>5</sup><br>If not set, or set to <b>false</b> , the back end operates in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container. If source is not populated, target defaults to <b>false</b> . |
|              |  |  | tl:marketCountryCode      |       |  | 0...1<br>0/2  | String  | Market country code. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | tl:businessPartyInfo      |       |  | 0...1<br>-    | -       | The full business information (e.g. business type, contact information) associated with the business entity that authorized the destruction of the serial numbers.                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | tl:businessId             |       |  | 1...*<br>1/*  | String  | <b>Required.</b> The identifier associated with the business entity that authorized the destruction of the serial number(s). <sup>7</sup>                                                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>2019-04-01<sup>2</sup>8888882028677<sup>3</sup>GLN<sup>4</sup>2017-02-18<sup>5</sup>false<sup>6</sup>US<sup>7</sup>8888882028677

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b> The business identifier type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                          |
|              |  |  |  |  | tl:businessClassification | 0...1<br>0/*  | String | The classification of the business.                                                                                                                                                                                                         |
|              |  |  |  |  | tl:BusinessPartyDetail    | 1...1<br>-    | -      | <b>Required.</b> The business name and address of the business entity that authorized the destruction of the serial numbers.                                                                                                                |
|              |  |  |  |  | tl:businessName           | 1...1<br>1/*  | String | <b>Required.</b> The business name of the entity that authorized the destruction of the serial numbers. <sup>1</sup>                                                                                                                        |
|              |  |  |  |  | tl:street1                | 1...1<br>1/*  | String | <b>Required.</b> The first line of the address for the company indicated in <b>tl:businessName</b> . <sup>2</sup>                                                                                                                           |
|              |  |  |  |  | tl:street2                | 0...1<br>0/*  | String | The second line of the address for the company indicated in <b>tl:businessName</b> . <sup>3</sup>                                                                                                                                           |
|              |  |  |  |  | tl:city                   | 1...1<br>1/*  | String | <b>Required.</b> The city for the company indicated in <b>tl:businessName</b> . <sup>4</sup>                                                                                                                                                |
|              |  |  |  |  | tl:village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                        |
|              |  |  |  |  | tl:houseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> . |
|              |  |  |  |  | tl:township               | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                       |
|              |  |  |  |  | tl:district               | 0...1<br>0/*  | String | District Code only for India.<br><div> Must be a 3-digit numeric code.</div>                                                                             |
|              |  |  |  |  | tl:stateOrRegion          | 1...1         | String | <b>Required.</b> The state, province, or region of the business entity indicated in <b>tl:businessName</b> , using the standard two-letter                                                                                                  |

<sup>1</sup>Kendall Pharma<sup>2</sup>300 Trade Center<sup>3</sup>Suite 7690<sup>4</sup>Woburn

| Data Element |  |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                           |               |        | 1                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | tl:postalCode             | 0...1<br>1/*  | String | The postal code for the company indicated in <b>tl:businessName</b> . <sup>2</sup>                                                                                                                                                                                                                |
|              |  |  |  |  |  | tl:country                | 1...1<br>1/*  | String | <b>Required.</b> The country where the company indicated in <b>tl:businessName</b> is located. The country uses the standard two-letter abbreviation specified in the ISO 3166-1alpha-2:1997 country code. <sup>3</sup><br>See the <a href="#">CountryCode</a> enumeration list for valid values. |
|              |  |  |  |  |  | tl:corporateFax           | 0...1<br>1/*  | String | Company fax number.                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | tl:addressObjectGUID      | 0...1<br>0/36 | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <sup>4</sup><br><div> Maximum of 36 characters, using the digits 0-9 and letters A-F</div>                           |
|              |  |  |  |  |  | tl:houseGUID              | 0...1<br>0/36 | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS). <sup>5</sup><br><div> Maximum of 36 characters, using the digits 0-9 and letters A-F</div>                     |
|              |  |  |  |  |  | tl:taxRegistrationCode    | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                            |
|              |  |  |  |  |  | tl:premisesCode           | 0...1<br>0/*  | String | Internal identifier a company uses for a specific location. For example, a company with 4 locations in the city of Mumbai that internally refers to the 4th location as MUM4.                                                                                                                     |
|              |  |  |  |  |  | tl:warehouseOperatorName  | 0...1<br>0/*  | String | Name of the person responsible for warehouse operations. <sup>6</sup>                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:decommissionReasonCode | 0...1<br>0/*  | String | <b>Required.</b> Reason code for destroying. <sup>7</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                                                                                                    |

<sup>1</sup>MA<sup>2</sup>01801<sup>3</sup>US<sup>4</sup>19406454-0022-000C-00B0-000000000152<sup>5</sup>986f2934-be05-438f-A30E-c15b90e15dbc<sup>6</sup>John Smith<sup>7</sup>PRODUCTION\_DEFECT

| Data Element |  |  |                  |                      | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|------------------|----------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                  | tl:reasonDescription | 0...1<br>0/*  | String   | Description for destroy reason code. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |                  | tl:destructionMethod | 0...1<br>0/*  | String   | <b>Required.</b><br>Method of destruction.<br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | AggregationEvent |                      | 0...*<br>-    | -        | <b>AggregationEvent</b> is option 2 for the <b>EventList</b> choice for the Aggregation events.<br><b>EventList = AggregationEvent</b> when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <code>ADD</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:packing</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:in_progress</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |                  | eventTime            | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>2</sup> <div>  The Event Time must be indicated in seconds. Default milliseconds to "0". This results in efficiency gains and smaller file sizes because serial numbers can be grouped together when the event times are the same. </div>                                                                                                                                                                                                                                                                                                                  |
|              |  |  |                  | eventTimeZoneOffset  | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |                  | parentID             | 1...1<br>1/*  | AnyURI   | <b>Required.</b> Identifier of the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPC of the case. For a case-to-pallet aggregation, the EPC of the pallet). <ul style="list-style-type: none"> <li>SGTIN: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code> E.g. <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> <li>SSCC: <code>urn:epc:id:sscc:&lt;company prefix&gt;.&lt;extension digit + serial number&gt;</code> E.g. <code>urn:epc:id:sscc:030944.10105363280</code></li> <li>CN EDMC: <code>http://epcis.tracelink.com/obj/cn-edmc/&lt;serial number&gt;</code> E.g. <code>http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943</code></li> </ul> |
|              |  |  |                  | childEPCs            | 1...1<br>-    | -        | <b>Required.</b> List of identifiers of the child items in the parent container in EPC Pure Identity URI format. Example: For an item-to-case aggregation, the EPCs of the items. For a case-to-pallet aggregation, the EPCs of the cases.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>Defect from production<sup>2</sup>2013-10-01T22:10:0Z<sup>3</sup>-04:00

| Data Element |  |  |  |                               | Occurs Length | Type    | Description                                                                                                                                                                  |
|--------------|--|--|--|-------------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | epc                           | 1...*<br>1/*  | String  | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> .                                               |
|              |  |  |  | action                        | 1...1<br>1/*  | String  | <b>Required.</b> The <b>action</b> value must equal <b>ADD</b> for the aggregation event. <sup>1</sup> See the <a href="#">ActionType</a> enumeration list for valid values. |
|              |  |  |  | bizStep                       | 0...1<br>0/*  | AnyURI  | The <b>bizStep</b> value must equal <code>urn:epcglobal:cbv:bizstep:packing</code> . <sup>2</sup>                                                                            |
|              |  |  |  | disposition                   | 0...1<br>0/*  | AnyURI  | The <b>disposition</b> value must equal <code>urn:epcglobal:cbv:disp:in_progress</code> . <sup>3</sup>                                                                       |
|              |  |  |  | readPoint                     | 0...1<br>-    | -       | Optional for <b>AggregationEvent</b> .                                                                                                                                       |
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location of where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>4</sup>                 |
|              |  |  |  | bizLocation                   | 1...1<br>-    | -       | <b>Required.</b> Mandatory for <b>AggregationEvent</b> .                                                                                                                     |
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup>               |
|              |  |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -       | Extensions used for Aggregation Event.                                                                                                                                       |
|              |  |  |  | tl:packedStatus               | 0...1<br>0/*  | String  | The packout of the item or container using the supported enumeration values. <sup>6</sup> See the <a href="#">PackedStatus</a> enumeration list for valid values.            |
|              |  |  |  | tl:quantity                   | 0...1<br>-    | Integer | The quantity of child serial numbers aggregated to the parent container in this aggregation. <sup>7</sup>                                                                    |

<sup>1</sup>ADD<sup>2</sup>urn:epcglobal:cbv:bizstep:packing<sup>3</sup>urn:epcglobal:cbv:disp:in\_progress<sup>4</sup>urn:epc:id:sgln:1100001.12345.0<sup>5</sup>urn:epc:id:sgln:1100001.12345.0<sup>6</sup>FULL<sup>7</sup>48

| Data Element |  |  |             |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|-------------|------------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |             | tl:resetContainerAggregation | 0...1<br>-    | Boolean | Reset container aggregation flag. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |             | tl:epcOrderItemDetails       | 0...1<br>-    | -       | Group header with specific link between the aggregation event epc and @orderItemNumber.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |             | tl:epcOrderItemList          | 0...1<br>-    | -       | <b>Required.</b> Subgroup header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |             | @orderItemNumber             | 0...1<br>0/*  | String  | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |             | tl:epcOrderItem              | 1...<br>1/*   | String  | <b>Required.</b> Serial numbers associated with the pricing and tax information in the current instance of <b>tl:orderItem</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |             | tl:extensionField            | 0...<br>-     | -       | Customer extension point to pass in one or more name/value pairs containing additional data attributes not already supported in this message.<br>These extensions are not stored by TraceLink and are used only for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message, such as when a CMO is required to provide additional data fields to the brand owner. In this case, TraceLink would have a custom map for that trade partner to map these fields outbound. Different trade partners may have different field requirements and may therefore require that <b>tl:extensionField</b> be populated differently per trade partner.<br><br>If this element group is populated both <b>tl:fieldName</b> and <b>tl:fieldValue</b> must be populated. |
|              |  |  |             | tl:fieldName                 | 1...1<br>1/*  | String  | <b>Required.</b> Populate with the field name provided by the trade partner receiving the mapped outbound message. The field name must match the field name provided by the trade partner exactly, including case, so that it can be properly detected in the outbound mapping.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |             | tl:fieldValue                | 1...1<br>1/*  | String  | <b>Required.</b> The field value content that corresponds to <b>tl:fieldName</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | ObjectEvent |                              | 1...1<br>-    | -       | <b>Required.</b> <b>ObjectEvent</b> describing shipping events. Data = <b>ObjectEvent</b> for Shipping Events.<br><b>EventList</b> = <b>ObjectEvent</b> Shipping when all of the following is true: <ul style="list-style-type: none"> <li>• <b>action</b> = <b>OBSERVE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:shipping</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_transit</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>false



| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|---------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <p><b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1].<sup>1</sup></p> <p>❗ The Event Time must be indicated in seconds. Default milliseconds to "0". This results in efficiency gains and smaller file sizes because serial numbers can be grouped together when the event times are the same.</p> |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <p><b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b>. Per Section 7.2.8 of [EPCIS1.0.1].<sup>2</sup></p>                                                                                                                                                                                         |
|              |  |  | epcList             | 1...1<br>-    | -        | <p><b>Required.</b> List of the EPCs of top-most containers (e.g. pallets, cases) in the shipment.</p>                                                                                                                                                                                                                                                                                           |
|              |  |  | epc                 | 1...*<br>1/*  | String   | <p><b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identity URI format.<sup>3</sup> See <a href="#">EPC Pure Identifier Format Examples</a>.</p>                                                                                                                                                                                                              |
|              |  |  | action              | 1...1<br>0/*  | String   | <p><b>Required.</b> The <b>action</b> value must equal <b>OBSERVE</b>.<sup>4</sup></p>                                                                                                                                                                                                                                                                                                           |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <p><b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:shipping</b>.<sup>5</sup></p>                                                                                                                                                                                                                                                                               |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI   | <p><b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_transit</b>.<sup>6</sup></p>                                                                                                                                                                                                                                                                            |
|              |  |  | readPoint           | 0...1<br>-    | -        | <p><b>Required.</b> This field identifies the location where the event occurred; i.e. the warehouse GLN location ID and storage location (e.g. shelf, bin) in URN format, that recorded the Object event.</p>                                                                                                                                                                                    |
|              |  |  | id                  | 1...1<br>0/*  | AnyURI   | <p><b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier.<sup>7</sup></p>                                                                                                                                                                                                                             |
|              |  |  | bizTransactionList  | 0...1<br>-    | -        | <p><b>Conditionally required</b> if <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:shipping</b>.</p>                                                                                                                                                                                                                                                                                              |

<sup>1</sup>2013-10-01T22:08:02.0Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:068202.0401034.11220207026272, urn:epc:id:sscc:030944.10105363280, http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943, http://epcis.tracelink.com/obj/ntin/4150.001647778.1000000000002<sup>4</sup>OBSERVE<sup>5</sup>urn:epcglobal:cbv:bizstep:shipping<sup>6</sup>urn:epcglobal:cbv:disp:in\_transit<sup>7</sup>urn:epc:id:sgln:0614141.12345.RP1

| Data Element |  |  |  |                | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|----------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizTransaction | 1...*<br>0/*  | AnyURI | <p><b>Required.</b> This field is the business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or invoice and/or purchase order governing this shipment, which are subject to Section 8.4.2 of (CBV1.0). The GLN that occurs after <code>urn:epcglobal:cbv:bt:</code> is the GLN of the party that issued the number (e.g. if customer issues PO Number, customer GLN is entered. If supplier issues ASN/delivery number supplier GLN is entered).<sup>1</sup></p> <p> A delivery number or ASN is mandatory. All other transaction types are optional.</p> <p>The transaction number requirements vary by region. It is recommended that the following are always provided, when available, to fulfill compliance needs:</p> <ul style="list-style-type: none"> <li>• Purchase Order Number</li> <li>• Invoice Number</li> <li>• ASN</li> </ul> |
|              |  |  |  | @type          | 1...1<br>1/*  | String | <p><b>Required.</b> The transaction identifier type using the supported enumeration values (e.g. PO, ASN, RETURN).<sup>2</sup></p> <p> Mandatory if <b>cmn:TransactionIdentifier</b> is populated. A delivery number or ASN is mandatory. All other transaction types are optional.</p> <p>See the <a href="#">TransactionId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | @date          | 0...1<br>0/*  | Date   | <p><b>Required.</b> The transaction identifier date.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | extension      | 1...1<br>-    | -      | <p>Main extension body for shipping event.</p> <p> Source and Destination lists are optional even if party address master data is stored in the <b>VocabularyElement</b> in the <b>EPCISMasterData</b> extension in the message header.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | sourceList     | 1...1<br>-    | -      | <p><b>Required.</b></p> <p>Source list identifies sending business, location, and carrier parties. <b>sourceList</b> supports one of two functions:</p> <ol style="list-style-type: none"> <li>1. <b>VocabularyElement</b> is populated with party address master data: <b>sourceList</b> identifies sold-from, ship-from, or carrier party. Party master data is mapped from <b>VocabularyElement</b>.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>urn:epcglobal:cbv:bt:0614141000029:9847856<sup>2</sup>urn:epcglobal:cbv:bt:desadv<sup>3</sup>2019-03-30

| Data Element |  |  |  |  |                 | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|-----------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                 |               |        | 2. <b>VocabularyElement</b> is not populated with party address master data: <b>sourceList</b> party identifiers used for master data lookup in the backend.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | source          | 1...*<br>0/*  | String | <p><b>Required.</b> Source party identifier for sold-from, ship-from, or carrier parties. Party identifier in source either:<sup>1</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-from, ship-from, or carrier party in populated <b>VocabularyElement</b>. Party address info is mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in sourceList   <b>source</b> and <b>VocabularyElement</b>   <b>@id</b>.</li> <li><b>sourceList/source</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is not populated or there is no match between party identifiers in <b>source</b> and <b>VocabularyElement</b>   <b>@id</b>. If ship-from party the same as sold-from party, ship-from identifier does not need to be sent.</li> </ol> <div> <p> If the ship-from party is the same as the sold-from party, the ship-from identifier does not need to be sent.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> </div> |
|              |  |  |  |  | @type           | 1...1<br>0/*  | String | <p><b>Required.</b>Type of source party identifier [i.e. owning (sold-from), location (ship-from), or carrier party.] Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Sold-from party = <a href="#">urn:epcglobal:cbv:sd:owning_party</a> (mandatory).</li> <li>Ship-from party = <a href="#">urn:epcglobal:cbv:sd:location</a> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | destinationList | -<br>-        | -      | <p><b>Required.</b></p> <p>Destination list identifies receiving business or location parties.</p> <p><b>destinationList</b> supports one of two functions:</p> <ol style="list-style-type: none"> <li><b>VocabularyElement</b> populated with party address master data: <b>destinationList</b> identifies sold-to, ship-to parties. Party master data mapped from <b>VocabularyElement</b>.</li> <li><b>VocabularyElement</b> NOT populated with party address master data: <b>destinationList</b> party identifiers used for master data lookup in backend.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | destination     | 1...*<br>0/*  | String | <p><b>Required.</b> Destination party identifier for sold-to or ship-to parties. Party identifier in destination either:<sup>3</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-to or ship-to parties in populated <b>VocabularyElement</b>. Party address info is mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in destinationList   <b>destination</b> and <b>VocabularyElement</b>   <b>@id</b>.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0<sup>2</sup>urn:epcglobal:cbv:sd:owning\_party<sup>3</sup>urn:epc:id:sgln:033333.101365.0

| Data Element |  |  |  |  |                            |       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|----------------------------|-------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                            |       |               |        | <p>2. destinationList   <b>destination</b> supports master data lookup in the TraceLink system. <b>VocabularyElement</b> is not populated or there is no match between party identifiers in destination and VocabularyElement   <b>@id</b>.</p> <p>If ship-to party is the same as sold-to party, ship-to identifier does not need to be sent.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |                            | @type | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies type of destination party identifier, i.e. owning (sold-to) or location (ship-to) party. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li>Sold-to party = <code>urn:epcglobal:cbv:sdt:owning_party</code> (mandatory).</li> <li>Ship-to party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:shippingEventExtensions |       | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>ShippingEvent</b> is populated. Extensions used for Shipping Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | tl:transactionDate         |       | 1...1<br>-    | Date   | <b>Required.</b> Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:shipToCountryCode       |       | 1...1<br>2/2  | String | <p><b>Required.</b> 2-letter ISO country code for ship to country. This value is referenced to advise regulatory reporting if it is required for the specified country market.<sup>3</sup></p> <p>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.</p>                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | tl:shipFromCountryCode     |       | 0...1<br>2/2  | String | <p>2-letter ISO country code for ship from country. This value is referenced to advise regulatory reporting if it is required for the specified country market.<sup>4</sup></p> <p>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.</p>                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:salesDistributionType   |       | 1...1<br>1/*  | String | <p><b>Required.</b> To set this value, compare the ship from country with the ship to country.<sup>5</sup></p> <ul style="list-style-type: none"> <li><b>INCOUNTRYSALE</b>: If ship from country = ship to country (indicates a sale within the same country).</li> <li><b>EXPORTSALE</b>: If ship from country &lt;&gt; ship to country (indicates a sale that is an export to another country).</li> <li><b>INCOUNTRYTRANSFER</b>: A transfer within a company or with a partner such as 3PL or contract manufacturer/packager, occurring within the same country.</li> <li><b>EXPORTTRANSFER</b>: A transfer within a company or with a partner such as 3PL or contract manufacturer/packager, made from one country to another.</li> </ul> |

<sup>1</sup>urn:epcglobal:cbv:sdt:owning\_party<sup>2</sup>2013-09-30<sup>3</sup>US<sup>4</sup>US<sup>5</sup>INCOUNTRYSALE

| Data Element |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|---------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                           |               |         | <ul style="list-style-type: none"> <li><b>INCOUNTRYRETURN</b>: A shipment for a return of goods to the supplier, shipped within the same country.</li> <li><b>EXPORTRETURN</b>: A shipment for a return of goods to the supplier, shipped from one country to another.</li> </ul> <p>The export value is not used.</p> <p>This value is referenced to advise regulatory reporting of exportation, if it is required for the specified country market. Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.</p> <p>See the <a href="#">SalesDistType</a> enumeration list for valid values.</p> |
|              |  |  |  | tl:supplyType             | 0...1<br>0/*  | String  | Identifies the type of supply that is being performed using one of the permitted values. <sup>1</sup><br>See the <a href="#">SupplyType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:contractType           | 0...1<br>0/*  | String  | Identifies the type of contract for the sale of goods using one of the permitted values. <sup>2</sup><br>See the <a href="#">ContractType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:dropShipmentIndicator  | 0...1<br>0/*  | Boolean | Indicates if shipment is a drop shipment. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:comments               | 0...1<br>0/*  | String  | Optional remarks or comments associated with delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:warehouseOperatorName  | 0...1<br>0/*  | String  | Name of the person responsible for warehouse operations. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:correctiveShipment     | 0...1<br>0/*  | String  | Corrective shipment flag is set when shipment is used to replace a previously voided shipment. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:originalDeliveryNumber | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>tl:correctiveShipment</b> flag = <b>true</b> . Used to identify previous delivery that was voided and is being replaced by current delivery. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | tl:contractNumber         | 0...1<br>0/*  | String  | Identification number of the contract. <sup>7</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>PatientDistribution<sup>2</sup>CompetitiveBid<sup>3</sup>false<sup>4</sup>John Smith<sup>5</sup>true<sup>6</sup>H9022413<sup>7</sup>1234567

| Data Element |  |  |  |                           | Occurs Length  | Type   | Description                                                                                                                                                         |
|--------------|--|--|--|---------------------------|----------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:fundingSource          | 0...1<br>0/*   | String | <b>Required..</b> Source of the funding. <sup>1</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                   |
|              |  |  |  | tl:entryPort              | 0...1<br>0/*   | String | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                            |
|              |  |  |  | tl:exitPort               | 0...1<br>0/*   | String | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                             |
|              |  |  |  | tl:deliveryInspection     | 0...1<br>0/*   | String | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values. |
|              |  |  |  | tl:deliveryInspectionDate | 0...1<br>10/10 | Date   | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>2</sup>                                                  |
|              |  |  |  | tl:deliveryInspectionNote | 0...1<br>0/*   | String | Comments about the physical delivery inspection against the delivery documentation.                                                                                 |
|              |  |  |  | tl:removalFromCirculation | 0...1<br>0/*   | String | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.           |
|              |  |  |  | tl:aggregationInspection  | 0...1<br>0/*   | String | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.            |
|              |  |  |  | tl:epcOrderItemDetails    | 0...1<br>-     | -      | Group header with specific link between the aggregation event epc and <b>@orderItemNumber</b> .                                                                     |
|              |  |  |  | tl:epcOrderItemList       | 1...<br>*      | -      | <b>Required.</b> Subgroup header.                                                                                                                                   |
|              |  |  |  | @orderItemNumber          | 0...1<br>0/*   | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .        |
|              |  |  |  | tl:epcOrderItem           | 1...<br>1/*    | String | <b>Required.</b> Serial numbers associated with the pricing and tax information in the current instance of <b>tl:orderItem</b> .                                    |
|              |  |  |  | tl:orderItemList          | 0...1<br>-     | -      | Order item list group is populated to communicate the pick quantities for each item code at the EACH (unit) level.                                                  |

<sup>1</sup>FederalBudgetFunds<sup>2</sup>2021-12-21

| Data Element |  |  |  |  |                             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|-----------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:orderItem                | 1...*<br>-    | -       | <b>Required.</b> Order item group is a repeating element that captures the item code, lot number and quantity for each item in the order. Each unique item code and lot number are communicated in a separate order item group.                                     |
|              |  |  |  |  | tl:orderItemNumber          | 0...1<br>0/*  | String  | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                                                                        |
|              |  |  |  |  | choice%1                    | -<br>-        | -       | <b>Conditionally required</b> if <b>ShipFromCountryCode</b> = <b>KR</b> . Populate only one of <b>cmn:InternalMaterialCode</b> or <b>cmn:PackagingItemCode</b> . One of the two options must be present.                                                            |
|              |  |  |  |  | tl:internalMaterialCode     | 0...1<br>1/*  | String  | <b>Conditionally required</b> if <b>cmn:PackagingItemCode</b> is not populated. Option 1 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the internal material number configured in Product Master Data. <sup>1</sup>                   |
|              |  |  |  |  | tl:packagingItemCode        | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>tl:internalMaterialCode</b> is not populated. Option 2 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>2</sup> |
|              |  |  |  |  | @type                       | 0...1<br>0/*  | String  | <b>Required.</b> The product code type for the packaging item code using the supported enumeration values (e.g. GTIN-14). See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                       |
|              |  |  |  |  | cbvmdata:lotNumber          | 0...1<br>0/*  | String  | The lot or batch code for the items to be picked (if available) in an alphanumeric String. <sup>3</sup>                                                                                                                                                             |
|              |  |  |  |  | cbvmdata:itemExpirationDate | 0...1<br>1/*  | Date    | The expiration date for the serialized item, in YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                                     |
|              |  |  |  |  | tl:quantity                 | 1...1<br>0/*  | String  | The quantity of items at the EACH (unit) level of the item code and lot if specified to be picked. <sup>5</sup>                                                                                                                                                     |
|              |  |  |  |  | tl:unitPrice                | 0...1<br>0/*  | Decimal | <b>Required.</b> Unit price of item. <sup>6</sup>                                                                                                                                                                                                                   |
|              |  |  |  |  | @currencyCode               | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>7</sup>                                                                                                                                                                                         |

<sup>1</sup>100234<sup>2</sup>00882025030223<sup>3</sup>A12345<sup>4</sup>2017-12-31<sup>5</sup>50<sup>6</sup>35.67<sup>7</sup>USD

| Data Element |  |  |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--|--|--------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:vat                   | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>1</sup>                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>2</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                  |
|              |  |  |  |  |  | tl:grossPrice            | 0...1<br>-    | Decimal | Gross price including unit price and all taxes and fees. <sup>3</sup>                                                                                                                                                                                                  |
|              |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>4</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                  |
|              |  |  |  |  |  | tl:isSerialized          | 0...1<br>0/*  | Boolean | Indicates if item is not serialized. If omitted, defaults to <b>true</b> . <sup>5</sup>                                                                                                                                                                                |
|              |  |  |  |  |  | tl:transactionIdentifier | 0...<br>0/*   | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>6</sup>                                                                                                                                           |
|              |  |  |  |  |  | @type                    | 1...1<br>1/*  | String  | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li>• <b>DESTRUCTION</b></li> <li>• <b>INVOICE</b></li> <li>• <b>NOTAFISCAL</b></li> <li>• <b>OTHER</b></li> <li>• <b>PO</b></li> <li>• <b>RETURN</b></li> </ul> |
|              |  |  |  |  |  | @date                    | 1...1<br>0/*  | Date    | The transaction identifier date. <sup>7</sup>                                                                                                                                                                                                                          |
|              |  |  |  |  |  | extension                | 0...1         | -       | EPCIS body event extension point. Contains the <b>TransformationEvent</b> . <b>TransformationEvent</b> is option 3 in the <b>EventList</b>                                                                                                                             |

<sup>1</sup>152.22<sup>2</sup>USD<sup>3</sup>152.22<sup>4</sup>USD<sup>5</sup>true<sup>6</sup>PO303005<sup>7</sup>2019-03-30



| Data Element |  |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|---------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                     |               |          | choice. This extension can appear before or after commissioning event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | TransformationEvent | 0...1<br>-    | -        | <p>Use the <b>TransformationEvent</b> to commission repackaged products. It is similar to the <b>CommissioningEvent</b>, but includes source products as input, and the commissioned serial numbers are the output repackaged products. The standard ilmd (instance level master data) captures product attributes, lot, and expiry like in a standard commission event. The <b>TransformationEvent</b> parameters are the same as the <b>CommissioningEvent</b> except there is no action:</p> <ul style="list-style-type: none"> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:commissioning</code> (Optional)</li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:active</code> (Optional)</li> </ul> <p> The source and repackaged products can only be eaches. Cases and innerpacks not permitted.</p> |
|              |  |  |  | eventTime           | 1...1<br>1/*  | DateTime | <p><b>Required.</b> The date/time when the disposition assigned occurs with a time zone indicator as specified in Section 9.5 of (EPCIS1.0.1) in YYYY-MM-DDTHH:MM:SS.mmZ format.<sup>1</sup></p> <p> The Event Time must be indicated in seconds. Default milliseconds to "0". This results in efficiency gains and smaller file sizes because serial numbers can be grouped together when the event times are the same.</p>                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | recordTime          | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in effect at time and place where the disposition assigned occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | inputEPCList        | 0...1<br>-    | -        | <p><b>Conditionally required</b> if <b>inputQuantityList</b> is missing; both groups may be present. The input EPC is the serial number of the source product that is transformed.</p> <p> Only eaches are allowed in transformation event epc lists.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | epc                 | 0...*<br>1/*  | String   | <p>The EPC identifier must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5].<sup>3</sup></p> <p>SGTIN:</p> <ul style="list-style-type: none"> <li>Format: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>2017-03-29T22:10:02.31Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:030000.0000001.100000001020 http://epcis.tracelink.com/obj/ntin/4150.001647778.1000000000002

| Data Element |  |  |  |  |                   | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|-------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                   |               |         | <ul style="list-style-type: none"> <li>Example: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | inputQuantityList | 0...1<br>-    | -       | <p><b>Conditionally required</b> if <b>inputEPCList</b> is missing; both groups may be present. Specifies non-serialized source products with packaging product code, lot number, and quantity.<br/>Format: <code>urn:epc:idpat:ObjectIdentifierType:CompanyPrefix.ItemRefAndIndicator.*</code></p> <ul style="list-style-type: none"> <li>For GTIN based source product, GTIN + Lot is expressed as:<br/><code>urn:epc:class:lgtn:030000.0000001.L12345</code></li> <li>For NTIN based source product, NTIN + Lot is expressed as:<br/><code>http://epcis.tracelink.com/hc/lntin/class/4150.001647778.L12345</code></li> </ul> <p> The source products can only reference GTINs and NTINs for eaches. Cases and innerpacks not permitted.</p> |
|              |  |  |  |  | quantityElement   | 1...*<br>-    | -       | <b>Required.</b> Identifies a quantity of source products that are identified by a specific class-level 940 identifier in urn format.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | epcClass          | 1...1<br>1/*  | String  | <p><b>Required.</b> A class level identifier for the source product in the <b>inputQuantityList</b> for which the quantity is provided.<sup>1</sup><br/>Format: <code>urn:epc:idpat:ObjectIdentifierType:CompanyPrefix.ItemRefAndIndicator.*</code></p> <ul style="list-style-type: none"> <li>For GTIN based source product, GTIN + Lot is expressed as:<br/><code>urn:epc:class:lgtn:030000.0000001.L12345</code></li> <li>For NTIN based source product, NTIN + Lot is expressed as:<br/><code>http://epcis.tracelink.com/hc/lntin/class/4150.001647778.L12345</code></li> </ul>                                                                                                                                                                                                                                             |
|              |  |  |  |  | quantity          | 1...1<br>-    | Integer | <b>Required.</b> A number that specifies how many or how much of the specified <b>epcClass</b> is denoted by this <b>quantityElement</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | uom               | 0...1<br>0/*  | String  | Unit of measure for the <b>epcClass</b> quantity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | outputEPCList     | 1...1<br>-    | -       | <p><b>Required.</b> Provides the epc serial number for the transformed product. <b>outputEPCList</b> is mandatory if <b>Transformation Event</b> is populated.</p> <p> Only eaches are allowed in Transformation Event EPC lists.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>urn:epc:class:lgtn:030000.0000001.L12345<sup>2</sup>10

| Data Element |  |  |  |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | epc              | 1...<br>1/*   | String | <p><b>Required.</b> Identifier of the child items in the parent container in EPC Pure Identifier URI format as specified in Section 6 of [TDS1.5].<sup>1</sup></p> <p>CN EDMC:</p> <ul style="list-style-type: none"> <li>Format: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/&lt;serial number&gt;</code></li> <li>Example: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943</code></li> </ul> <p>SGTIN:</p> <ul style="list-style-type: none"> <li>Format: <code>urn:epc:id:sgtin:&lt;company prefix&gt;.&lt;indicator digit + item reference&gt;.&lt;serial number&gt;</code></li> <li>Example: <code>urn:epc:id:sgtin:068202.0401034.11220207026272</code></li> </ul> <p>SSCC:</p> <ul style="list-style-type: none"> <li>Format: <code>http://epcis.tracelink.com/hc/ntin/obj/&lt;company prefix&gt;.&lt;item reference&gt;.&lt;serial number&gt;</code></li> <li>Example: <code>http://epcis.tracelink.com/hc/ntin/obj/4150.001647778.100000000002</code></li> </ul> |
|              |  |  |  | transformationID | 0...1<br>0/*  | AnyURI | An identifier that links this event to other Transformation Events using an identical <b>transformationID</b> value. When specified, all inputs to all events sharing the same value of the <b>transformationID</b> may contribute to all outputs of all events sharing that value of <b>transformationID</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | bizStep          | 0...1<br>0/*  | AnyURI | The <b>bizStep</b> value must be set to <code>urn:epcglobal:cbv:bizstep:commissioning</code> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | disposition      | 0...1<br>0/*  | AnyURI | The <b>disposition</b> value must be set to <code>urn:epcglobal:cbv:disp:active</code> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | readPoint        | 0...1<br>-    | -      | Not used in Transformation Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | id               | 0...1<br>0/*  | AnyURI | Not used in Transformation Event. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | bizLocation      | 1...1<br>-    | -      | <b>Required.</b> Refers to the location of the product after the Transformation Event has occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>urn:epc:id:sgtin:088202.5503022.1000000000670<sup>2</sup>urn:epcglobal:cbv:bizstep:commissioning<sup>3</sup>urn:epcglobal:cbv:disp:active<sup>4</sup>urn:epc:id:sgln:7777776.67345.0

| Data Element |  |  |  |                              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|------------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | id                           | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the commissioning occurred. This may be a site-level SGLN or a finer-grain location identifier. <sup>1</sup>                                                                                                                             |
|              |  |  |  | bizTransactionList           | 0...*<br>1/*  | String | The business transaction identifiers provide an unordered list of 0 or more business transactions that define the context of this event.                                                                                                                                                          |
|              |  |  |  | ilmd                         | 0...1<br>-    | -      | Instance lot master data specific to product being commissioned.                                                                                                                                                                                                                                  |
|              |  |  |  | cbvmdata:lotNumber           | 0...1<br>1/*  | String | <b>Required.</b> The lot number associated with the <b>tl:internalMaterialCode</b> , <b>tl:packagingItemCode</b> , or <b>tl:countryDrugCode</b> specified above that is used to identify the serial numbers that will be updated. <sup>2</sup>                                                    |
|              |  |  |  | cbvmdata:itemExpirationDate  | 0...1<br>0/*  | Date   | The expiration date for the serialized item in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                    |
|              |  |  |  | tl:commissionEventExtensions | 0...1<br>-    | -      | <b>Required.</b> Extensions used for Commission <b>ObjectEvent</b> .                                                                                                                                                                                                                              |
|              |  |  |  | tl:filterValue               | 0...1<br>-    | Int    | Not used.                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:packagingLevel            | 1...1<br>0/*  | String | <b>Required.</b> The packaging level of the commissioned item.<br>Valid value: <b>EA</b> = Each <sup>4</sup><br><div> <i>ⓘ</i> To be GS1 EPCIS-conformant, send this value in the VocabularyElement master data, unless current item has an SSCC code with associated product master data. </div> |
|              |  |  |  | tl:epcAttributes             | 0...*<br>-    | -      | Supports optional inclusion of human readable barcode content associated with each epc number in a commission event. Only included if provided in original commission event.                                                                                                                      |
|              |  |  |  | @epc                         | 1...1<br>1/*  | String | The EPC serial number to which the <b>tl:barcodeContent</b> is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5].<br>Valid value: <b>SGTIN</b> <sup>5</sup>                                                                                              |

<sup>1</sup>urn:epc:id:sgln:7777776.67345.0<sup>2</sup>L120012<sup>3</sup>2019-12-31<sup>4</sup>EA<sup>5</sup>urn:epc:id:sgtin:088202.0503022.100000001020

| Data Element |  |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|--|-------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:barcodeContent       | 1...1<br>0/*  | String | The human readable barcode contents encoded in the 2D barcode with parenthesis for the AI keys. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | tl:plantLocationId      | 0...1<br>0/*  | String | Identifier of plant where products are commissioned. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | tl:productionLineId     | 0...1<br>1/*  | String | Identifier of production line where products are commissioned. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  | tl:lineManagerName      | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | tl:companyPrefix        | 0...1<br>0/*  | String | The GS1 Company Prefix.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:internalMaterialCode | 0...1<br>0/*  | String | Internal material number for the product in the Pharmaceutical Manufacturer's internal systems (e.g. ERP). <sup>5</sup><br><br><div> <i>i</i> See the following additional information: <ul style="list-style-type: none"> <li>To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> Master Data, unless the current item has an SSCC code with associated product master data.</li> <li>The message may include either <b>tl:internalMaterialCode</b>, <b>tl:countryDrugCode</b>, or both, but all packaging levels must be consistent.</li> </ul> </div> |
|              |  |  |  |  |  | tl:packagingItemCode    | 0...1<br>0/*  | String | The product code for the commissioned item (e.g. GTIN-14). <sup>6</sup><br><br><div> <i>i</i> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data. </div>                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | @type                   | 1...1<br>1/*  | String | <b>Conditionally required</b> if <b>tl:packagingItemCode</b> is populated. The product code type. Valid values: <sup>7</sup> <ul style="list-style-type: none"> <li>GTIN-14</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>(01)00882025030223(21)100000001020(17)190331(10)L120012<sup>2</sup>M0034<sup>3</sup>L009<sup>4</sup>John Smith<sup>5</sup>11002541210<sup>6</sup>00882025030223<sup>7</sup>GTIN-14

| Data Element |  |  |  |  |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|--|--|--|--------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                          |               |        | <ul style="list-style-type: none"> <li>NTIN</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | tl:countryDrugCode       | 0...1<br>0/*  | String | <p>The national drug code for the commissioned item (e.g. NDC number for US products).<sup>1</sup></p> <p><b>i</b> See the following additional information:</p> <ul style="list-style-type: none"> <li>To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> Master Data, unless the current item has an SSCC code with associated product master data.</li> <li>The message may include either <b>tl:internalMaterialCode</b>, <b>tl:countryDrugCode</b>, or both, but all packaging levels must be consistent.</li> </ul> |
|              |  |  |  |  |  |  | @type                    | 1...1<br>1/*  | String | <p><b>Required.</b> The national drug code type using the supported enumeration values and any formatting instructions provided.<sup>2</sup></p> <p><b>i</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p>                                                                                                                              |
|              |  |  |  |  |  |  | tl:manufacturingDate     | 0...1<br>0/10 | Date   | The date of manufacture for the serialized item in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | tl:countryMarket         | 0...1<br>0/3  | String | The country using the standard two or three-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | tl:printedExpirationDate | 0...1<br>0/10 | Date   | Expiration date printed on label in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  |  | tl:referenceDocuments    | 0...1<br>-    | -      | Reference document identifier associated with the commissioning activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | tl:poNumber              | 0...1<br>0/*  | String | PO Number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | tl:poLine                | 0...1         | String | PO Line number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>8202503022<sup>2</sup>US\_NDC442<sup>3</sup>2017-03-29<sup>4</sup>US<sup>5</sup>2017-03-29

| Data Element |  |  |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|--|------------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:workOrderNumber           | 0...1<br>0/*  | String  | Work Order number associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  |  | tl:referenceIdentifier       | 0...1<br>0/*  | String  | Reference identifier (e.g. any type of identifier) associated with serial number use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | tl:extensionField            | 0...*<br>-    | -       | <p>Customer extension point to supply 1 or more name/value pairs containing additional data attributes not already supported in this message.</p> <p> If this element group is populated both <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated.</p> <p> These extensions are not stored by TraceLink and are only used for outbound mapping purposes when there is a requirement to provide additional data to a partner for this message, such as when a CMO is required to provide additional data fields to the brand owner. In this case, TraceLink would have a custom map for that partner to map these fields outbound. Different partners may have different field requirements and may therefore require that the <b>ExtensionField</b> be populated differently per trade partner.</p> |
|              |  |  |  |  |  |  | tl:fieldName                 | 1...1<br>1/*  | String  | <p><b>Required.</b> Populate with the field name provided by the partner that will be receiving the mapped outbound message.<sup>1</sup></p> <p> The field name must match the field name provided by the trade partner exactly, including case so that it can be properly detected in the outbound mapping.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  |  | tl:fieldValue                | 1...1<br>1/*  | String  | <b>Required.</b> Populate with the field value content that corresponds to <b>tl:fieldName</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | extension                    | 0...1<br>-    | -       | <b>TransformationEvent</b> extension.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | tl:decommissionSourceProduct | 0...1<br>-    | Boolean | When set to <b>true</b> , instructs system to implicitly decommission serial numbers used for repackaging. Saves a step in the repack operation so that separate decommission events do not need to be sent. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | tl:registerSourceProduct     | 0...1         | Boolean | Triggers registration of serial numbers that are not known to the TraceLink system. Defaults to <b>false</b> if not populated. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>POTENCY<sup>2</sup>100 MG<sup>3</sup>true<sup>4</sup>true

| Data Element |  |  |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                 |
|--------------|--|--|--|--|--|-----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                             |               |        | If value = <b>true</b> , <b>tl:repackInputAttributes</b> element group must be populated.                                                                   |
|              |  |  |  |  |  | tl:repackInputAttributes    | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>cmn:registerSourceProduct</b> = <b>true</b> . Repack input common attributes group with product info for input product. |
|              |  |  |  |  |  | cbvmdata:lotNumber          | 1...1<br>0/20 | String | <b>Required.</b> The lot or batch code for the transformation input product in an alphanumeric string of up to 20 characters. <sup>1</sup>                  |
|              |  |  |  |  |  | cbvmdata:itemExpirationDate | 0...1<br>0/*  | Date   | <b>Required.</b> The expiration date for the transformation input product in YYYY-MM-DD format. <sup>2</sup>                                                |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmdata="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:gslushc="http://epcis.gslus.org/hc/ns" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2017-08-31T17:45:20.0Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">1223331013844</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>201907251</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-01-09T19:12:53</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>B64894<sup>2</sup>2020-04-28



```

    </sbdh:DocumentIdentification>
  </sbdh:StandardBusinessDocumentHeader>
  <extension>
    <EPCISMasterData>
      <VocabularyList>
        <Vocabulary type="urn:epcglobal:epcis:vtype:EPCClass">
          <VocabularyElementList>
            <VocabularyElement id="urn:epc:idpat:sgtin:068202.0401034.*">
              <attribute id="http://epcis.tracelink.com/mda/packageTypeCode">CS</attribute>
              <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">133661</attribute>
              <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">MANUFACTURER_PART_NUMBER</attribute>
            </VocabularyElement>
          </VocabularyElementList>
        </Vocabulary>
        <Vocabulary type="urn:epcglobal:epcis:vtype:Location">
          <VocabularyElementList>
            <!-- SourceList owning_party (sold from business party) -->
            <VocabularyElement id="urn:epc:id:sgln:088202.867701.0">
              <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>
              <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">712333444</attribute>
              <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">DEA</attribute>
              <attribute
id="http://epcis.tracelink.com/mda/businessClassification">MANUFACTURER</attribute>
              <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
              <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
              <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
              <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
              <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
              <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
              <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
              <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
              <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
              <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
              <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
              <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
            </VocabularyElement>
          </VocabularyElementList>
        </Vocabulary>
      </VocabularyList>
    </EPCISMasterData>
  </extension>

```

```

        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- SourceList loccation (ship from location) -->
    <VocabularyElement id="urn:epc:id:sgln:088202.867702.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">712333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">DEA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- DestinationList owning_party (sold to business party) -->
    <VocabularyElement id="urn:epc:id:sgln:033333.101365.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Grondin Pharmacy</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">P1223330</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">HIN</attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode">PHARMACY</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">100 Main Street</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Porsmouth</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>

```

```

    <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
    <attribute id="urn:epcglobal:cbv:mda#state">NH</attribute>
    <attribute id="urn:epcglobal:cbv:mda#postalCode">03801</attribute>
    <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
    <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
  </VocabularyElement>
  <!-- DestinationList location (ship to location) -->
  <VocabularyElement id="http://epcis.gsln.org/hc/dea/loc/12345678">
    <attribute id="urn:epcglobal:cbv:mda#name">Grondin Pharmacy</attribute>
    <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">122333</attribute>
    <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">COMPANYSITEID</attribute>
    <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">100 Main Street</attribute>
    <attribute id="urn:epcglobal:cbv:mda#city">Porsmouth</attribute>
    <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
    <attribute id="urn:epcglobal:cbv:mda#state">NH</attribute>
    <attribute id="urn:epcglobal:cbv:mda#postalCode">03801</attribute>
    <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
    <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
  </VocabularyElement>
  <!-- SourceList loation (carrier party) -->
  <VocabularyElement id="urn:epc:id:sgln:064202.867703.0">
    <attribute id="urn:epcglobal:cbv:mda#name">FED EX</attribute>
    <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">180 Fedex Road</attribute>

```

```

        <attribute id="urn:epcglobal:cbv:mda#city">Atlanta</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/district">456</attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">GA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">31305</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
</VocabularyElementList>
</Vocabulary>
</VocabularyList>
</EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <ObjectEvent>
            <eventTime>2019-07-25T21:39:23.8307Z</eventTime>
            <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
            <epcList>
                <epc>urn:epc:id:sgtin:068202.0401034.11220207024595</epc>
            </epcList>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
            <disposition>urn:epcglobal:cbv:disp:active</disposition>
            <bizLocation>
                <id>urn:epc:id:sgln:9997777.01994.0</id>
            </bizLocation>
            <extension>
                <ilmd>
                    <cbvmda:lotNumber>L120010</cbvmda:lotNumber>
                </ilmd>
            </extension>
        </ObjectEvent>
    </EventList>
</EPCISBody>
</EPCIS>

```

```

        <cbvmda:itemExpirationDate>2029-01-20</cbvmda:itemExpirationDate>
        <tl:commissionEventExtensions>
            <tl:manufacturingDate>2019-07-25</tl:manufacturingDate>
        </tl:commissionEventExtensions>
    </ilmd>
</extension>
</ObjectEvent>
<ObjectEvent>
    <eventTime>2019-07-25T21:39:24.830Z</eventTime>
    <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
    <epcList>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024594</epc>
    </epcList>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
    <disposition>urn:epcglobal:cbv:disp:active</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:9997777.01994.0</id>
    </bizLocation>
    <extension>
        <ilmd>
            <cbvmda:lotNumber>L120012</cbvmda:lotNumber>
            <cbvmda:itemExpirationDate>2029-07-25</cbvmda:itemExpirationDate>
            <tl:commissionEventExtensions>
                <tl:manufacturingDate>2019-07-25</tl:manufacturingDate>
            </tl:commissionEventExtensions>
        </ilmd>
    </extension>
</ObjectEvent>
<AggregationEvent>
    <eventTime>2019-09-25T21:39:26.8307Z</eventTime>
    <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sgtin:068202.0401034.11220207024597</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026272</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026273</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>

```

```

    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
      <id>urn:epc:id:sgln:9997777.01994.0</id>
    </bizLocation>
  </AggregationEvent>
  <!-- Shipping -->
  <ObjectEvent>
    <eventTime>2019-07-25T21:39:27.8Z</eventTime>
    <eventTimeZoneOffset/>
    <epcList>
      <epc>urn:epc:id:sscc:005434.40000000021</epc>
    </epcList>
    <action>OBSERVE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:shipping</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_transit</disposition>
    <readPoint>
      <id>urn:epc:id:sgln:9997777.01994.0</id>
    </readPoint>
    <bizTransactionList>
      <bizTransaction type="urn:epcglobal:cbv:btt:po" date="2019-07-
25">urn:epcglobal:cbv:bt:0333331013655:45006290016</bizTransaction>
      <bizTransaction type="urn:epcglobal:cbv:btt:desadv" date="2019-07-
25">urn:epcglobal:cbv:bt:0882028677019:H9022413</bizTransaction>
    </bizTransactionList>
    <extension>
      <sourceList>
        <source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:9997777.01994.0</source>
        <source type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:9997777.01994.0</source>
        <source type="http://epcis.tracelink.com/sdt/carrier_
party">urn:epc:id:sgln:064202.867703.0</source>
      </sourceList>
      <destinationList>
        <destination type="urn:epcglobal:cbv:sdt:owning_
party">urn:epc:id:sgln:1223331.01384.0</destination>
        <destination
type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:1223331.01384.0</destination>
      </destinationList>
    </extension>
    <tl:shippingEventExtensions>

```

```

<tl:transactionDate>2019-07-25</tl:transactionDate>
<tl:shipToCountryCode>US</tl:shipToCountryCode>
<tl:salesDistributionType>INCOUNTRYSALE</tl:salesDistributionType>
<tl:supplyType>MedicalCareDistribution</tl:supplyType>
<tl:contractType>CompetitiveBid</tl:contractType>
<tl:dropShipmentIndicator>>false</tl:dropShipmentIndicator>
<tl:comments>Special shipment handling</tl:comments>
<tl:contractNumber>C008</tl:contractNumber>
<tl:warehouseOperatorName>John Smith</tl:warehouseOperatorName>
<tl:correctiveShipment>>true</tl:correctiveShipment>
<tl:originalDeliveryNumber>H9022413</tl:originalDeliveryNumber>
<tl:fundingSource>OwnFunds</tl:fundingSource>
<tl:entryPort></tl:entryPort>
<tl:exitPort></tl:exitPort>
<tl:epcOrderItemDetails>
  <tl:epcOrderItemList orderItemNumber="807">
    <tl:epcOrderItem>urn:epc:id:sgtin:068202.0401034.11220207024597</tl:epcOrderItem>
  </tl:epcOrderItemList>
</tl:epcOrderItemDetails>
<tl:orderItemList>
  <tl:orderItem>
    <tl:orderItemNumber>807</tl:orderItemNumber>
    <tl:packagingItemCode type="GTIN-14">00882025503022</tl:packagingItemCode>
    <cbvmda:itemExpirationDate>2029-07-25</cbvmda:itemExpirationDate>
    <tl:quantity>5</tl:quantity>
    <tl:unitPrice currencyCode="USD">100.00</tl:unitPrice>
    <tl:vat currencyCode="USD">50.00</tl:vat>
    <tl:grossPrice currencyCode="USD">150.00</tl:grossPrice>
    <tl:transactionIdentifier type="PO" date="2019-09-25">P090</tl:transactionIdentifier>
  </tl:orderItem>
</tl:orderItemList>
</tl:shippingEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                        | Error Message                                                      | Description                                                                                                                                                                                                 | Inbound / Outbound |
|-----------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>Class 1</b>                                      |                                                                    |                                                                                                                                                                                                             |                    |
| sbdh:Sender   <b>sbdh:Identifier</b>                | Source message sender is required !!!                              | The error occurs if the source is empty or null.                                                                                                                                                            | OB                 |
| sbdh:Sender   sbdh:Identifier   <b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                               | IB                 |
|                                                     | Partner type in source type attribute is required !!!              | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                                                                         | OB                 |
| sbdh:Receiver   <b>sbdh:Identifier</b>              | Source message receiver is required !!!                            | The error occurs if the source is empty or null.                                                                                                                                                            | OB                 |
| sbdh:Receiver   sbdh:Identifier   <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!                | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                               | IB                 |
|                                                     | Partner type in source type attribute is required !!!              | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                                                                         | OB                 |
| VocabularyElement   <b>@id</b>                      | Item code is required in source VocabularyElement[@id] !!!         | The error occurs if the source <b>@id</b> that identifies the product code for which master data is being sent is missing.                                                                                  | IB                 |
|                                                     | SGTIN or NTIN or CN-EDMC in VocabularyElement id is required !!!   | The error occurs if the source <b>@id</b> that identifies the product code for which master data is being sent is not in SGTIN, NTIN, or CN-EDMC format and master data is present in the header extension. | IB                 |
| VocabularyElement   <b>attribute</b>                | Valid packagingLevel code required !!!                             | The error occurs if the source <b>attribute</b> that identifies the packaging level is not a valid value from the enumeration list.                                                                         | IB                 |
|                                                     | Packaging code in source PackagingLevel is required !!!            | The error occurs if cmnPackagingLevel is empty or null.                                                                                                                                                     | OB                 |
|                                                     | Packaging Level is required if header master data is populated !!! | The error occurs if the source <b>attribute</b> that identifies the packaging level is not present but header master data is present.                                                                       | IB                 |
|                                                     | Only one country drug code is supported !!!                        | The error occurs if the source <b>attribute</b> that identifies the country drug code contains more than one drug code.                                                                                     | IB                 |
|                                                     | Either InternalMaterialCode or CountryDrugCode                     | The error occurs if both an internal material                                                                                                                                                               | OB                 |



| Data Element                  | Error Message                                                   | Description                                                                                                                                                                                                          | Inbound / Outbound |
|-------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                               | is required !!!                                                 | number and country drug code are not present.                                                                                                                                                                        |                    |
| VocabularyElement             | Sold from party identifier is required !!!                      | The error occurs if the source <b>VocabularyElement</b> that contains the sold from business party identifier and address information is missing and Vocabulary   @type equals "urn:epcglobal:epcis:vtype:Location". | IB                 |
| VocabularyElement   @id       | GLN party type not supported. SGLN is required !!!              | The error occurs if the source @id that identifies the SGLN for the sold from or transfer from business party is a GLN.                                                                                              | IB                 |
|                               | Valid sold from business party identifier type is required !!!  | The error occurs if the source @id for the identifier type for the sold from business party embedded in the urn/http prefix is invalid.                                                                              | IB/OB              |
| VocabularyElement   attribute | Valid additional business party identifier type is required !!! | The error occurs if the source <b>attribute</b> that identifies the type of BusinessID identifier for the sold from party name is invalid.                                                                           | OB                 |
|                               | Sold from party business name is required !!!                   | The error occurs if the source <b>attribute</b> that identifies the sold from party name is missing or null.                                                                                                         | IB/OB              |
|                               | Valid business classification code is required !!!              | The error occurs if the source <b>attribute</b> for Argentina business classification for the sold from business party is invalid.                                                                                   | IB                 |
|                               | Sold from party business street address is required !!!         | The error occurs if the source <b>attribute</b> for the first line of the sold from business or party's street address is missing or null.                                                                           | IB/OB              |
|                               | Sold from party city name is required !!!                       | The error occurs if the source <b>attribute</b> that identifies the sold from business or party's city is missing or null.                                                                                           | IB/OB              |
|                               | 3-digit numeric District code required for country India !!!    | The error occurs if the source <b>attribute</b> that identifies the sold from business or party's District code for India is invalid and country = IN.                                                               | IB/OB              |
|                               | Sold from business party state or region is required !!!        | The error occurs if the source <b>attribute</b> that identifies the sold from business or party's state or                                                                                                           | IB                 |

| Data Element                         | Error Message                                                                   | Description                                                                                                                                                                           | Inbound / Outbound |
|--------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                                      |                                                                                 | region is missing or null.                                                                                                                                                            |                    |
|                                      | Sold from party state code is required !!!                                      | The error occurs if the source <b>attribute</b> that identifies the sold from business or party's state or region is missing or null.                                                 | OB                 |
|                                      | Sold from business party country is required !!!                                | The error occurs if the source <b>attribute</b> that identifies the sold from business or party's country is missing or null.                                                         | IB                 |
|                                      | Valid Sold from business party country is required !!!                          | The error occurs if the source <b>attribute</b> that identifies the sold from business or party's country is present but there is no matching entry in the lookup file.               | IB                 |
|                                      | Valid sold from party country code is required !!!                              | The error occurs if the source <b>attribute</b> that identifies the sold from business or party's country is present but there is no matching entry in the lookup file.               | OB                 |
| VocabularyElement                    | Ship from party info required in VocabularyElement if present in sourceList !!! | The error occurs if the source <b>VocabularyElement</b> that contains the ship from business party identifier and address information is present in <b>sourceList</b> but is missing. | IB                 |
| VocabularyElement   @id              | GLN party type not supported. SGLN is required !!!                              | The error occurs if the source <b>@id</b> that identifies the SGLN for the ship from location is a GLN.                                                                               | IB                 |
|                                      | Valid ship from business party identifier type is required !!!                  | The error occurs if the source <b>@id</b> for the identifier type for the ship from business party location embedded in the urn/http prefix is invalid.                               | IB                 |
|                                      | Valid ship from location identifier type is required !!!                        | The error occurs if the source <b>@id</b> for the identifier type for the ship from business party location embedded in the urn/http prefix is invalid.                               | OB                 |
| VocabularyElement   <b>attribute</b> | Valid additional location identifier type is required !!!                       | The error occurs if the source <b>attribute</b> that identifies the type of FacilityID identifier for the sold from party name is invalid.                                            | OB                 |
|                                      | Ship from business party name is required !!!                                   | The error occurs if the source <b>attribute</b> that identifies the ship from party name is missing or                                                                                | IB                 |

| Data Element      | Error Message                                                | Description                                                                                                                                                             | Inbound / Outbound |
|-------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                   |                                                              | null.                                                                                                                                                                   |                    |
|                   | Ship from location name is required !!!                      | The error occurs if the source <b>attribute</b> that identifies the ship from party name is missing or null.                                                            | OB                 |
|                   | Ship from location street address is required !!!            | The error occurs if the source <b>attribute</b> for the first line of the ship from business or party's street address is missing or null.                              | IB/OB              |
|                   | Ship from location city name is required !!!                 | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's city is missing or null.                                              | IB/OB              |
|                   | 3-digit numeric District code required for country India !!! | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's District code for India is invalid and country = IN.                  | IB/OB              |
|                   | Ship from location state or region is required !!!           | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's state or region is missing or null.                                   | IB                 |
|                   | Ship from location state code is required !!!                | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's state or region is missing or null.                                   | OB                 |
|                   | Ship from location country is required !!!                   | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's country is missing or null.                                           | IB                 |
|                   | Valid Ship from location country is required !!!             | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's country is present but there is no matching entry in the lookup file. | IB                 |
|                   | Valid ship from location country code is required !!!        | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's country is present but there is no matching entry in the lookup file. | OB                 |
| VocabularyElement | Sold to party identifier is required !!!                     | The error occurs if the source <b>VocabularyElement</b> that contains the sold to business party identifier                                                             | IB                 |

| Data Element                  | Error Message                                                   | Description                                                                                                                                   | Inbound / Outbound |
|-------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                               |                                                                 | and address information is missing and Vocabulary I @type equals "urn:epcglobal:epcis:vtype:Location".                                        |                    |
| VocabularyElement I @id       | GLN party type not supported. SGLN is required !!!              | The error occurs if the source @id that identifies the SGLN for the sold to or transfer to business party is a GLN.                           | IB                 |
|                               | Valid sold to business party identifier type is required !!!    | The error occurs if the source @id for the identifier type for the sold to business party embedded in the urn/http prefix is invalid.         | IB/OB              |
| VocabularyElement I attribute | Valid additional business party identifier type is required !!! | The error occurs if the source attribute that identifies the type of BusinessID identifier for the sold to party name is invalid.             | OB                 |
|                               | Sold to party business name is required !!!                     | The error occurs if the source attribute that identifies the sold to party name is missing or null.                                           | IB/OB              |
|                               | Valid business classification code is required !!!              | The error occurs if the source attribute for Argentina business classification for the sold to business party is invalid.                     | IB                 |
|                               | Sold to business party street address is required !!!           | The error occurs if the source attribute for the first line of the sold to business or party's street address is missing or null.             | IB                 |
|                               | Sold to business party city is required !!!                     | The error occurs if the source attribute that identifies the sold to business or party's city is missing or null.                             | IB                 |
|                               | Sold to party city name is required !!!                         | The error occurs if the source attribute that identifies the sold to business or party's city is missing or null.                             | OB                 |
|                               | 3-digit numeric District code required for country India !!!    | The error occurs if the source attribute that identifies the sold to business or party's District code for India is invalid and country = IN. | IB/OB              |
|                               | Sold to business party state or region is required !!!          | The error occurs if the source attribute that identifies the sold to business or party's state or region is missing or null.                  | IB                 |

| Data Element                         | Error Message                                                                      | Description                                                                                                                                                                              | Inbound / Outbound |
|--------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                                      | Sold to party state code is required !!!                                           | The error occurs if the source <b>attribute</b> that identifies the sold to business or party's state or region is missing or null.                                                      | OB                 |
|                                      | Sold to business party country is required !!!                                     | The error occurs if the source <b>attribute</b> that identifies the sold to business or party's country is missing or null.                                                              | IB                 |
|                                      | Valid Sold to business party country is required !!!                               | The error occurs if the source <b>attribute</b> that identifies the sold to business or party's country is present but there is no matching entry in the lookup file.                    | IB                 |
|                                      | Valid sold to party country code is required !!!                                   | The error occurs if the source <b>attribute</b> that identifies the sold to business or party's country is present but there is no matching entry in the lookup file.                    | OB                 |
| VocabularyElement                    | Ship to party info required in VocabularyElement if present in destinationList !!! | The error occurs if the source <b>VocabularyElement</b> that contains the ship to business party identifier and address information is present in <b>destinationList</b> but is missing. | IB                 |
| VocabularyElement   @id              | GLN party type not supported. SGLN is required !!!                                 | The error occurs if the source <b>@id</b> that identifies the SGLN for the ship to location is a GLN.                                                                                    | IB                 |
|                                      | Valid ship to business party identifier type is required !!!                       | The error occurs if the source <b>@id</b> for the identifier type for the ship to business party location embedded in the urn/http prefix is invalid.                                    | IB                 |
|                                      | Ship to location identifier is required !!!                                        | The error occurs if the group that contains source <b>@id</b> for the identifier type for the ship to business party location is present but the source <b>@id</b> is missing.           | OB                 |
|                                      | Valid ship to location identifier type is required !!!                             | The error occurs if the source <b>@id</b> for the identifier type for the ship to business party location embedded in the urn/http prefix is invalid.                                    | OB                 |
| VocabularyElement   <b>attribute</b> | Valid additional location identifier type is required !!!                          | The error occurs if the source <b>attribute</b> that identifies the type of BusinessID identifier for the ship to party name is invalid.                                                 | OB                 |

| Data Element | Error Message                                                | Description                                                                                                                                                           | Inbound / Outbound |
|--------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|              | Ship to business party name is required !!!                  | The error occurs if the source <b>attribute</b> that identifies the ship to party name is missing or null.                                                            | IB                 |
|              | Ship to location name is required !!!                        | The error occurs if the source <b>attribute</b> that identifies the ship to party name is missing or null.                                                            | OB                 |
|              | Ship to location street address is required !!!              | The error occurs if the source <b>attribute</b> for the first line of the ship to business or party's street address is missing or null.                              | IB/OB              |
|              | Ship to location city is required !!!                        | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's city is missing or null.                                            | IB                 |
|              | Ship to location city name is required !!!                   | The error occurs if the source <b>attribute</b> that identifies the ship from business or party's city is missing or null.                                            | OB                 |
|              | 3-digit numeric District code required for country India !!! | The error occurs if the source <b>attribute</b> that identifies the ship to business or party's District code for India is invalid and country = IN.                  | IB/OB              |
|              | Ship to location state or region is required !!!             | The error occurs if the source <b>attribute</b> that identifies the ship to business or party's state or region is missing or null.                                   | IB                 |
|              | Ship to location state code is required !!!                  | The error occurs if the source <b>attribute</b> that identifies the ship to business or party's state or region is missing or null.                                   | OB                 |
|              | Ship to location country is required !!!                     | The error occurs if the source <b>attribute</b> that identifies the ship to business or party's country is missing or null.                                           | IB                 |
|              | Valid Ship to location country is required !!!               | The error occurs if the source <b>attribute</b> that identifies the ship to business or party's country is present but there is no matching entry in the lookup file. | IB                 |
|              | Valid ship to party country code is required !!!             | The error occurs if the source <b>attribute</b> that identifies the ship to business or party's country is present but there is no matching entry in the              | OB                 |

| Data Element                  | Error Message                                                                 | Description                                                                                                                                                                         | Inbound / Outbound |
|-------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                               |                                                                               | lookup file.                                                                                                                                                                        |                    |
| VocabularyElement             | Carrier party info required in VocabularyElement if present in sourceList !!! | The error occurs if the source <b>VocabularyElement</b> that contains the carrier business party identifier and address information is present in <b>sourceList</b> but is missing. | IB                 |
| VocabularyElement   @id       | GLN party type not supported. SGLN is required !!!                            | The error occurs if the source <b>@id</b> that identifies the SGLN for the carrier business party is a GLN.                                                                         | IB                 |
|                               | Valid carrier business party identifier type is required !!!                  | The error occurs if the source <b>@id</b> for the identifier type for the carrier business party embedded in the urn/http prefix is invalid.                                        | IB/OB              |
|                               | Carrier business party identifier is required !!!                             | The error occurs if the group that contains source <b>@id</b> for the identifier type for the carrier business party location is present but the source <b>@id</b> is missing.      | OB                 |
| VocabularyElement   attribute | Valid additional carrier business party identifier type is required !!!       | The error occurs if the source <b>attribute</b> that identifies the type of BusinessID identifier for the carrier party name is invalid.                                            | OB                 |
|                               | Carrier business party name is required !!!                                   | The error occurs if the source <b>attribute</b> that identifies the carrier party name is missing or null.                                                                          | IB                 |
|                               | Carrier business party street address is required !!!                         | The error occurs if the source <b>attribute</b> for the first line of the carrier business party's street address is missing or null.                                               | IB                 |
|                               | Carrier business party city is required !!!                                   | The error occurs if the source <b>attribute</b> that identifies the carrier business party's city is missing or null.                                                               | IB                 |
|                               | 3-digit numeric District code required for country India !!!                  | The error occurs if the source <b>attribute</b> that identifies the carrier business party's District code for India is invalid and country = IN.                                   | IB                 |
|                               | Carrier business party state or region is required !!!                        | The error occurs if the source <b>attribute</b> that identifies the carrier business party's state or region is missing or null.                                                    | IB                 |

| Data Element                                                                               | Error Message                                                                                 | Description                                                                                                                                                        | Inbound / Outbound |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                                                                                            | Sold to business party country is required !!!                                                | The error occurs if the source <b>attribute</b> that identifies the sold to business or party's country is missing or null.                                        | IB                 |
|                                                                                            | Valid Carrier business party country is required !!!                                          | The error occurs if the source <b>attribute</b> that identifies the carrier business party's country is present but there is no matching entry in the lookup file. | IB                 |
| EventList   <b>choice</b>                                                                  | At least one object for shipping is required !!!                                              | The error occurs if the required source is missing or null.                                                                                                        | IB                 |
| epcList   <b>epc</b>                                                                       | Invalid EPC format !!!                                                                        | The error occurs if the source is invalid.                                                                                                                         | IB                 |
|                                                                                            | Valid serial number format is required !!!                                                    | The error occurs if the source is invalid.                                                                                                                         | OB                 |
| ObjectEvent for commissioning events   <b>bizStep</b>                                      | bizStep urn:epcglobal:cbv:bizstep:commissioning is required for ObjectEvent commissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:commissioning" for a commissioning event.                                                 | IB                 |
| ObjectEvent for commissioning events   <b>disposition</b>                                  | Disposition urn:epcglobal:cbv:disp:active is required for ObjectEvent commissioning !!!       | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:active".                                                                                     | IB                 |
| ObjectEvent for commissioning events   bizLocation   <b>id</b>                             | Event location in the commissioning event is required !!!                                     | The error occurs if the source is empty or null.                                                                                                                   | IB                 |
| ObjectEvent for commissioning events   extension   ilmd   <b>cbvmda:lotNumber</b>          | Lot number is required !!!                                                                    | The error occurs if the source is a CN-EDMC , GTIN, or NTIN, but source is empty or null.                                                                          | IB/OB              |
| ObjectEvent for commissioning events   extension   ilmd   <b>cbvmda:itemExpirationDate</b> | Expiration date is required !!!                                                               | The error occurs if the source is a CN-EDMC , GTIN, or NTIN, but source is empty or null.                                                                          | IB                 |
| tl:packagingLevel                                                                          | Packaging Level is required !!!                                                               | The error occurs if source is serial number China, GTIN, or NTIN, but source is empty or null.                                                                     | IB                 |
| tl:productionLineId                                                                        | Production line ID is required for China product !!!                                          | The error occurs if epcList   <b>epc</b> prefix = "http://epcis.tracelink.com/obj/cn-edmn/", but source is empty or null.                                          | IB/OB              |
| tl:lineManagerName                                                                         | Line manager name for China product is required !!!                                           | The error occurs if epcList   <b>epc</b> prefix = "http://epcis.tracelink.com/obj/cn-edmn/", but source is empty or null.                                          | IB                 |



| Data Element                                                                                                 | Error Message                                                                            | Description                                                                                                                       | Inbound / Outbound |
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|                                                                                                              | LineManagerName is required for China product !!!                                        | The error occurs if epcList   <b>epc</b> prefix = "http://epcis.tracelink.com/obj/cn-edmn/", but the source is empty or null.     | OB                 |
| ObjectEvent for commissioning events  <br>tl:commissionEventExtensions   tl:countryDrugCode   <b>@type</b>   | Valid country drug code type is required if country drug code is populated !!!           | The error occurs if tl:countryDrugCode is present but the source is empty or null.                                                | OB                 |
| ObjectEvent for commissioning events  <br>tl:commissionEventExtensions   tl:packagingItemCode   <b>@type</b> | Product type attribute is required when source PackagingItemCode is populated !!!        | The error occurs if tl:packagingItemCode is present but the source is empty or null.                                              | OB                 |
|                                                                                                              | Packaging code in source PackagingLevel is required !!!                                  | The error occurs if the source is empty or null.                                                                                  | OB                 |
| ObjectEvent for decommissioning events   epcList   <b>epc</b>                                                | Invalid EPC format !!!                                                                   | The error occurs if the source is invalid.                                                                                        | IB                 |
|                                                                                                              | Serial number is required !!!                                                            | The error occurs if the source is empty or null.                                                                                  | OB                 |
| ObjectEvent for decommissioning events   <b>action</b>                                                       | Action DELETE is required for decommissioning !!!                                        | The error occurs if the source does not equal "DELETE" for decommission.                                                          | IB                 |
| ObjectEvent for decommissioning events   <b>bizStep</b>                                                      | bizStep<br>urn:epcglobal:cbv:bizstep:decommissioning is required for decommissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:decommissioning" for a decommissioning event.            | IB                 |
| ObjectEvent for decommissioning events   <b>disposition</b>                                                  | Disposition urn:epcglobal:cbv:disp:inactive is required for decommissioning !!!          | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:inactive".                                                  | IB                 |
| ObjectEvent for decommissioning events   <b>readPoint</b>                                                    | Event Location Required !!!                                                              | The error occurs if the source is invalid, or is empty or null.                                                                   | OB                 |
| ObjectEvent for decommissioning events   readPoint   <b>id</b>                                               | Source read point ID is required !!!                                                     | The error occurs if the source is empty or null.                                                                                  | IB                 |
|                                                                                                              | Valid Event Location Type Required !!!                                                   | The error occurs if the source is present, but there is no matching entry in the lookup file.                                     | OB                 |
| ObjectEvent for decommissioning events   bizTransactionList  <br>bizTransaction   <b>@type</b>               | Valid bizTransaction type is required if bizTransaction is populated !!!                 | The error occurs if cmn:BizTransaction is populated, but the source is empty or null.                                             | IB                 |
|                                                                                                              | Valid transaction identifier type is required if TransactionIdentifier is populated !!!  | The error occurs if bizTransaction is present but the source is empty or null, or is not a valid value from the enumeration list. | OB                 |
| tl:marketCountryCode                                                                                         | Market Country Code must be at least two                                                 | The error occurs if source is populated, but is less                                                                              | IB                 |

| Data Element                                                                                                | Error Message                                                     | Description                                                                                                                                                                                 | Inbound / Outbound |
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|                                                                                                             | characters !!!                                                    | than 2 characters.                                                                                                                                                                          |                    |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br>tl:businessId   <b>@type</b>                     | Valid business party identifier type is required !!!              | The error occurs if the source <b>@type</b> for the authorizing business entity's identifier is present, but there is no matching entry in the lookup file, or the source is empty or null. | OB                 |
|                                                                                                             | Party type attribute is required when BusinessId is populated !!! | The error occurs if cmn:BusinessId is present but the source is missing or empty.                                                                                                           | IB                 |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br><b>tl:businessId</b>                             | Business party identifier is required !!!                         | The error occurs if cmn:BusinessId is present but the source is missing or null.                                                                                                            | IB                 |
|                                                                                                             | Decommissioning business party ID is required !!!                 | The error occurs if tl:businessPartyInfo is populated, but the source is empty or null.                                                                                                     | OB                 |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br><b>tl:businessClassification</b>                 | Valid business classification value is required !!!               | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                               | IB/OB              |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br>tl:BusinessPartyDetail   <b>tl:businessName</b>  | Business party name is required !!!                               | The error occurs if the source is empty or null.                                                                                                                                            | IB/OB              |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br>tl:BusinessPartyDetail   <b>tl:street1</b>       | Business party street address is required !!!                     | The error occurs if the source is empty or null.                                                                                                                                            | IB/OB              |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br>tl:BusinessPartyDetail   <b>tl:city</b>          | Business party city is required !!!                               | The error occurs if the source is empty or null.                                                                                                                                            | IB/OB              |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br>tl:BusinessPartyDetail   <b>tl:district</b>      | 3-digit numeric District code required for country India !!!      | The error occurs if country = IN, but district is not a 3-digit numeric code.                                                                                                               | IB/OB              |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br>tl:BusinessPartyDetail   <b>tl:stateOrRegion</b> | Business party state or region is required !!!                    | The error occurs if the source is empty or null.                                                                                                                                            | IB/OB              |
| tl:decommissionEventExtensions   tl:businessPartyInfo  <br>tl:BusinessPartyDetail   <b>tl:country</b>       | Business party country is required !!!                            | The error occurs if the source is empty or null.                                                                                                                                            | IB/OB              |
| tl:warehouseOperatorName                                                                                    | Warehouse operator name for China product is required !!!         | The error occurs if epcList   <b>epc</b> prefix = "http://epcis.tracelink.com/obj/cn-edmn/", but source is empty or null.                                                                   | IB/OB              |
| tl:decommissionReasonCode                                                                                   | Valid reason code is required !!!                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                               | IB/OB              |

| Data Element                                                                    | Error Message                                                                           | Description                                                                                                                              | Inbound / Outbound |
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| tl:decommissionEventExtensions   <b>tl:destructionMethod</b>                    | Valid destruction method code is required !!!                                           | The error occurs if the source is present, but there is no matching entry in the lookup file.                                            | IB/OB              |
| ObjectEvent for destroying events   epclList   <b>epc</b>                       | Invalid EPC format !!!                                                                  | The error occurs if the source is invalid.                                                                                               | IB                 |
| ObjectEvent for destroying events   <b>action</b>                               | Action DELETE is required for destroying !!!                                            | The error occurs if the source does not equal "DELETE" for destroying.                                                                   | IB                 |
| ObjectEvent for destroying events   <b>bizStep</b>                              | bizStep urn:epcglobal:cbv:bizstep:destroying is required for destroying !!!             | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:destroying" for a destroying event.                             | IB                 |
| ObjectEvent for destroying events   <b>disposition</b>                          | Disposition urn:epcglobal:cbv:disp:destroyed is required for destroying !!!             | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:destroyed".                                                        | IB                 |
| ObjectEvent for destroying events   <b>readPoint</b>                            | Event Location Required !!!                                                             | The error occurs if the source is invalid, or is empty or null.                                                                          | OB                 |
| ObjectEvent for destroying events   readPoint   <b>id</b>                       | Source read point ID is required !!!                                                    | The error occurs if the source is empty or null.                                                                                         | IB                 |
|                                                                                 | Valid Event Location Type Required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                            | OB                 |
| ObjectEvent for destroying events   bizTransactionList   <b>@type</b>           | Valid bizTransaction type is required if bizTransaction is populated !!!                | The error occurs if <b>cmn:BizTransaction</b> is populated, but the source is empty or null.                                             | IB                 |
|                                                                                 | Valid transaction identifier type is required if TransactionIdentifier is populated !!! | The error occurs if <b>bizTransaction</b> is present but the source is empty or null, or is not a valid value from the enumeration list. | OB                 |
| tl:destroyEventExtensions   <b>tl:marketCountryCode</b>                         | Valid market country code is required !!!                                               | The error occurs if the source is present, but there is no matching entry in the lookup file.                                            | OB                 |
| tl:destroyEventExtensions   tl:businessPartyInfo   tl:businessId   <b>@type</b> | Valid business party identifier type is required !!!                                    | The error occurs if the source is present, but there is no matching entry in the lookup file, or the source is empty or null.            | IB                 |
|                                                                                 | Party type attribute is required when BusinessId is populated !!!                       | The error occurs if <b>cmn:BusinessId</b> is present but the source is missing or null.                                                  | IB                 |
|                                                                                 | Valid business party identifier type is required !!!                                    | The error occurs if the source is present, but there is no matching entry in the lookup file, or the source is empty or null.            | OB                 |

| Data Element                                                                                        | Error Message                                                                           | Description                                                                                                 | Inbound / Outbound |
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| tl:destroyEventExtensions   tl:businessPartyInfo   <b>tl:businessId</b>                             | Business party identifier is required !!!                                               | The error occurs if the source is empty or null.                                                            | IB/OB              |
| tl:destroyEventExtensions   tl:businessPartyInfo   <b>tl:businessClassification</b>                 | Valid business classification is required !!!                                           | The error occurs if the source is present, but there is no matching entry in the lookup file.               | OB                 |
| tl:destroyEventExtensions   tl:businessPartyInfo   tl:BusinessPartyDetail   <b>tl:businessName</b>  | Business party name is required !!!                                                     | The error occurs if the source is empty or null.                                                            | IB/OB              |
| tl:destroyEventExtensions   tl:businessPartyInfo   tl:BusinessPartyDetail   <b>tl:street1</b>       | Business party street address is required !!!                                           | The error occurs if the source is empty or null.                                                            | IB/OB              |
| tl:destroyEventExtensions   tl:businessPartyInfo   tl:BusinessPartyDetail   <b>tl:city</b>          | Business party city is required !!!                                                     | The error occurs if the source is empty or null.                                                            | IB/OB              |
| tl:destroyEventExtensions   tl:businessPartyInfo   tl:BusinessPartyDetail   <b>tl:district</b>      | 3-digit numeric District code required for country India !!!                            | The error occurs if country = IN, but district is not a 3-digit numeric code.                               | IB/OB              |
| tl:destroyEventExtensions   tl:businessPartyInfo   tl:BusinessPartyDetail   <b>tl:stateOrRegion</b> | Business party state or region is required !!!                                          | The error occurs if the source is empty or null.                                                            | IB/OB              |
| tl:destroyEventExtensions   tl:businessPartyInfo   tl:BusinessPartyDetail   <b>tl:country</b>       | Business party country is required !!!                                                  | The error occurs if the source is empty or null.                                                            | IB/OB              |
| AggregationEvent   <b>parentID</b>                                                                  | Invalid EPC format !!!                                                                  | The error occurs if the number cannot be translated or is empty or null.                                    | IB                 |
|                                                                                                     | Valid parent serial number format is required !!!                                       | The error occurs if the source is invalid.                                                                  | OB                 |
| AggregationEvent   childEPCs   <b>epc</b>                                                           | Valid serial number format is required !!!                                              | The error occurs if the source is invalid.                                                                  | OB                 |
| AggregationEvent   <b>bizStep</b>                                                                   | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!      | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing" for an aggregation event. | IB                 |
| AggregationEvent   <b>disposition</b>                                                               | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".                         | IB                 |
| AggregationEvent   bizLocation   <b>id</b>                                                          | Event location in the aggregation event is required !!!                                 | The error occurs if the source is missing, null, or empty.                                                  | IB                 |
| tl:aggregationEventExtensions   <b>@orderItemNumber</b>                                             | Order item number is required if serial number is present !!!                           | The error occurs if <b>tl:epcOrderItem</b> is present and matches an epc value and the source is missing.   | IB                 |

| Data Element                                                                         | Error Message                                                                           | Description                                                                                                                           | Inbound / Outbound |
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| tl:extensionField   <b>tl:fieldName</b>                                              | Field name is required if ExtensionField group present in source !!!                    | The error occurs if tl:extensionField is populated, but the source is empty or null.                                                  | IB/OB              |
| tl:extensionField   <b>tl:fieldValue</b>                                             | Field value is required if ExtensionField group present in source !!!                   | The error occurs if tl:extensionField is populated, but the source is empty or null.                                                  | IB/OB              |
| ObjectEvent for shipping events                                                      | Shipping event data is required !!!                                                     | The error occurs if the source is empty or null.                                                                                      | IB                 |
|                                                                                      | Only one shipping event is required !!!                                                 | The error occurs if more than one shipping event is present.                                                                          | IB                 |
| ObjectEvent for shipping events   <b>bizStep</b>                                     | bizStep urn:epcglobal:cbv:bizstep:shipping is required for ObjectEvent shipping !!!     | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:shipping" for a ship event.                                  | IB                 |
| ObjectEvent for shipping events   <b>disposition</b>                                 | Disposition urn:epcglobal:cbv:disp:in_transit is required for ObjectEvent shipping !!!  | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_transit".                                                    | IB                 |
| ObjectEvent for shipping events   <b>readPoint</b>                                   | Event Location Required !!!                                                             | The error occurs if the source is invalid, or is empty or null.                                                                       | OB                 |
| ObjectEvent for shipping events   readPoint   <b>id</b>                              | Event location in the shipping event is required !!!                                    | The error occurs if the source is empty or null.                                                                                      | IB                 |
|                                                                                      | Valid Event Location Type Required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                         | OB                 |
| ObjectEvent for shipping events   <b>bizTransactionList</b>                          | Biz transaction list is required in shipping event !!!                                  | The error occurs if the source is empty or null.                                                                                      | IB                 |
| ObjectEvent for shipping events   bizTransactionList   bizTransaction   <b>@type</b> | Valid bizTransaction type is required if bizTransaction is populated !!!                | The error occurs if cmn:BizTransaction is populated, but the source is empty or null.                                                 | IB                 |
|                                                                                      | Valid transaction identifier type is required if TransactionIdentifier is populated !!! | The error occurs if bizTransaction is present but the source is empty or null, or is not a valid value from the enumeration list.     | OB                 |
|                                                                                      | Transaction identifier type required if TransactionIdentifier populated !!!             | The error occurs if cmn:TransactionIdentifier is present but the source is empty or null.                                             | OB                 |
| SourceList   <b>source</b>                                                           | Valid sold-from business lookup identifier type is required !!!                         | The error occurs if the source <b>source</b> for the second instance of the party identifier for the sold-from party type is invalid. | IB                 |
|                                                                                      | Ship-from party identifier must match an identifier                                     | The error occurs if the source <b>source</b> for the first                                                                            | IB                 |

| Data Element                           | Error Message                                                    | Description                                                                                                                                | Inbound / Outbound |
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|                                        | in VocabularyElement[@id] !!!                                    | instance of the party identifier for the ship-from party does not match the VocabularyElement   @id value in the party master data header. |                    |
|                                        | Valid carrier business lookup identifier type is required !!!    | The error occurs if the source <b>source</b> for the second instance of the party identifier for the ship-from party type is invalid.      | IB                 |
| destinationList   <b>destination</b>   | Valid sold-to business lookup identifier type is required !!!    | The error occurs if the source <b>destination</b> for the second instance of the party identifier for the sold-to party type is invalid.   | IB                 |
|                                        | Valid ship-to business lookup identifier type is required !!!    | The error occurs if the source <b>destination</b> for the second instance of the party identifier for the ship-to party type is invalid.   | IB                 |
| tl:shippingEventExtensions             | shippingEventExtensions required if shipping event populated !!! | The error occurs if the source is empty or null.                                                                                           | IB                 |
| tl:shipToCountryCode                   | Valid ISO country code for ship-to country is required !!!       | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                        | IB                 |
|                                        | Valid ShipTo Country Code is required !!!                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                                              | OB                 |
| tl:shipFromCountryCode                 | Valid ISO country code is required !!!                           | The error occurs if the source is not a valid value from the enumeration list.                                                             | IB                 |
|                                        | Ship from country for export products is required !!!            | The error occurs if SalesDistributionType = EXPORTSALE, EXPORTTRANSFER, or EXPORTRETURN, but source is empty or null.                      | IB                 |
|                                        | Valid ShipFrom Country Code is required !!!                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                                              | OB                 |
| tl:salesDistributionType               | Valid sales distributionType is required !!!                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                        | IB                 |
|                                        | Valid Sales Distribution Type is required !!!                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                                              | OB                 |
| tl:epcOrderItemList   @orderItemNumber | Order item number is required if serial number is                | The error occurs if the source is missing and                                                                                              | IB                 |

| Data Element                                                                        | Error Message                                                                     | Description                                                                                   | Inbound / Outbound |
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|                                                                                     | present !!!                                                                       | tl:epcOrderItem is present and matches an epc value.                                          |                    |
| tl:shippingEventExtensions   tl:carrierParty   tl:address   <b>tl:businessName</b>  | Carrier party business name is required !!!                                       | The error occurs if the source is empty or null.                                              | OB                 |
| tl:shippingEventExtensions   tl:carrierParty   tl:address   <b>tl:Street1</b>       | Carrier party business street address is required !!!                             | The error occurs if the source is empty or null.                                              | OB                 |
| tl:shippingEventExtensions   tl:carrierParty   tl:address   <b>tl:City</b>          | Carrier party city name is required !!!                                           | The error occurs if the source is empty or null.                                              | OB                 |
| tl:shippingEventExtensions   tl:carrierParty   tl:address   <b>tl:district</b>      | 3-digit numeric District code required for country India !!!                      | The error occurs if the source is empty or null.                                              | OB                 |
| tl:shippingEventExtensions   tl:carrierParty   tl:address   <b>tl:StateorRegion</b> | Carrier party state code is required !!!                                          | The error occurs if the source is empty or null.                                              | OB                 |
| tl:shippingEventExtensions   tl:carrierParty   tl:address   <b>tl:Country</b>       | Valid Carrier party country code is required !!!                                  | The error occurs if the source is empty or null.                                              | OB                 |
| tl:shippingEventExtensions   <b>tl:internalMaterialCode</b>                         | One of internalMaterialCode or packagingItemCode is required !!!                  | The error occurs if if both tl:packaingItemCode and the source are empty or null.             | OB                 |
| tl:shippingEventExtensions   tl:packagingItemCode   <b>@type</b>                    | Valid Item Code Type is required !!!                                              | The error occurs if the source is present, but there is no matching entry in the lookup file. | OB                 |
|                                                                                     | Product type attribute is required when source PackagingItemCode is populated !!! | The error occurs if tl:packagingItemCode is present, but the source is empty or null.         | OB                 |
| choice1                                                                             | One of internalMaterialCode or packagingItemCode is required !!!                  | The error occurs if both tl:internalMaterialCode and tl:packagingItemCode are empty or null.  | IB                 |
| tl:unitPrice   <b>@currencyCode</b>                                                 | Valid ISO currency code is required !!!                                           | The error occurs if tl:unitPrice is populated, but the source is empty or null.               | IB                 |
|                                                                                     | Valid Currency Code is required if Unit Price exists !!!                          | The error occurs if tl:unitPrice is populated, but the source is invalid.                     | OB                 |
| tl:vat   <b>@currencyCode</b>                                                       | Currency Code is required if VAT is present !!!                                   | The error occurs if tl:vat is populated, but the source is empty or null.                     | OB                 |
| tl:grossPrice   <b>@currencyCode</b>                                                | Currency Code is required if grossPrice is present !!!                            | The error occurs if tl:grossPrice is populated, but the source is empty or null.              | IB                 |

| Data Element                     | Error Message                                                                               | Description                                                                                                                                             | Inbound / Outbound |
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|                                  | Currency Code is required if GrossPrice is present !!!                                      | The error occurs if tl:grossPrice is populated, but the source is empty or null.                                                                        | OB                 |
| tl:transactionIdentifier   @type | Valid business transaction type is required !!!                                             | The error occurs if tl:transactionIdentifier is present, but the source is not a valid value from the enumeration list, or the source is empty or null. | IB/OB              |
| inputEPCList                     | One of either inputEPCList OR inputQuantityList is required !!!                             | The error occurs if both inputQuantityList and the source are empty or null.                                                                            | IB                 |
| inputEPCList   epc               | Invalid EPC format !!!                                                                      | The error occurs if the source value could not be translated or is in a format other than SGTIN, NTIN, or CN-EDMC.                                      | IB                 |
|                                  | SSCC code is invalid in inputEPCList !!!                                                    | The error occurs if the source is not an SGTIN, NTIN, or CN-EDMC.                                                                                       | IB                 |
| quantityElement   epcClass       | Lot number is required !!!                                                                  | The error occurs if the source is empty or null.                                                                                                        | IB                 |
|                                  | Valid item code is required !!!                                                             | The error occurs if the source is invalid.                                                                                                              | IB                 |
| quantityElement   quantity       | Input quantity for epcClass is required !!!                                                 | The error occurs if inputQuantityList is populated, but the source is empty or null.                                                                    | IB                 |
|                                  | Quantity is required for lot level input !!!                                                | The error occurs if cmn:QuantityElement is populated, but the source is empty or null.                                                                  | OB                 |
| outputEPCList                    | Output epc list is required !!!                                                             | The error occurs if the source is empty or null.                                                                                                        | IB                 |
| outputEPCList   epc              | China resource code serial number is not supported. Serial number must be NTIN or SGTIN !!! | The error occurs if the source is not a NTIN or SGTIN.                                                                                                  | IB                 |
|                                  | epc serial number is required !!!                                                           | The error occurs if the source is empty or null.                                                                                                        | IB                 |
|                                  | Invalid EPC format !!!                                                                      | The error occurs if the source is invalid.                                                                                                              | IB                 |
|                                  | SSCC code is invalid in outputEPCList !!!                                                   | The error occurs if the source is invalid.                                                                                                              | IB/OB              |
|                                  | Serial number is required !!!                                                               | The error occurs if the source is invalid.                                                                                                              | OB                 |
|                                  | Valid serial number format is required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                           | OB                 |



| Data Element                                                                                  | Error Message                                                                              | Description                                                                                                                                         | Inbound / Outbound |
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|                                                                                               | Invalid serial number format !!!                                                           | The error occurs if the source is invalid.                                                                                                          | OB                 |
| tl:repackInputAttributes   <b>cbvmda:lotNumber</b>                                            | Lot number is required if RepackInputAttributes is present !!!                             | The error occurs if tl:repackInputAttributes is present, but the source is empty or null.                                                           | OB                 |
| tl:repackInputAttributes   <b>cbvmda:itemExpirationDate</b>                                   | Expiration date is required if RepackInputAttributes is present !!!                        | The error occurs if cmn:RepackInputAttributes is present, but the source is empty or null.                                                          | OB                 |
| TransformationEvent   <b>bizLocation</b>                                                      | bizLocation ID is required !!!                                                             | The error occurs if the source is empty or null.                                                                                                    | OB                 |
| TransformationEvent   ilmd   tl:commissionEventExtensions   tl:countryDrugCode   <b>@type</b> | Valid country drug code type is required if country drug code is populated !!!             | The error occurs if tl:countryDrugCode is populated, but the source is not a valid value from the enumeration list, or the source is empty or null. | OB                 |
| TransformationEvent   ilmd   <b>cbvmda:lotNumber</b>                                          | Lot number is required !!!                                                                 | The error occurs if source is serial number China, GTIN, or NTIN, but source is empty or null.                                                      | IB                 |
|                                                                                               | Lot number is required if ItemDetail group populated in TransformationEvent!!!             | The error occurs if ilmd is populated, but the source is empty or null.                                                                             | OB                 |
| TransformationEvent   ilmd   <b>cbvmda:itemExpirationdate</b>                                 | Expiration date number is required if ItemDetail group populated in TransformationEvent!!! | The error occurs if the ItemDetail group is populated, but the source is empty or null.                                                             | OB                 |
| tl:repackInputAttributes                                                                      | repackInputAttributes group is required if registerSourceProduct equals true !!!           | The error occurs if tl:registerSourceProduct is set to true, but the source is empty or null.                                                       | IB                 |
| tl:extensionField   <b>tl:fieldName</b>                                                       | Field name is required !!!                                                                 | The error occurs if the source is empty or null.                                                                                                    | IB                 |
|                                                                                               | Field name is required if extensionField group present in source !!!                       | The error occurs if the source is empty or null.                                                                                                    | OB                 |
| tl:fieldValue                                                                                 | Field value is required !!!                                                                | The error occurs if the source is empty or null.                                                                                                    | IB                 |
|                                                                                               | Field value is required if extensionField group present in source !!!                      | The error occurs if the source is empty or null.                                                                                                    | OB                 |
| <b>Class 2</b>                                                                                |                                                                                            |                                                                                                                                                     |                    |
| bizTransaction   <b>@date</b>                                                                 | Transaction Identifier Date is required for products sold in Russia                        | The error occurs if a Target Market in Product Master Data for the decommissioned or destroyed product = "RU", but the source is empty or null.     |                    |
|                                                                                               | Transaction Identifier Date is required if Ship To Country Code = RU                       | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                                    |                    |

| Data Element              | Error Message                                                                                                                                                                                                                                                                        | Description                                                                                                                                                                                                                                                                                                                                                                                                       | Inbound / Outbound |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| bizTransaction   @type    | Transaction Identifier for 'Removal from Circulation' is required for products sold in Russia                                                                                                                                                                                        | The error occurs if one of the Target Markets in Product Master Data for the decommissioned or destroyed product = "RU", but the source does not equal "http://epcis.tracelink.com/hc/btt/removal".                                                                                                                                                                                                               |                    |
| destinationList           | Serialized Operations Manager Shipment inbound processing could not be completed. The ReceiverInfo with either ToBusinessPartyLookupId or ToBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified.   | The error occurs if <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |                    |
| sourceList                | Serialized Operations Manager Shipment inbound processing could not be completed. The SenderInfo with either FromBusinessPartyLookupId or FromBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified. | The error occurs if <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |                    |
| tl:addressObjectGUID      | AddressObjectGUID cannot be blank for Country RU.                                                                                                                                                                                                                                    | The error occurs if tl:country = "RU", but the source is empty or null.                                                                                                                                                                                                                                                                                                                                           |                    |
| tl:decommisisonReasonCode | Reason Code is required for products sold in Russia                                                                                                                                                                                                                                  | The error occurs if a Target Market in Product Master Data for the decommissioned or destroyed product = "RU", but the source is empty or null.                                                                                                                                                                                                                                                                   |                    |
| tl:destructionMethod      | Destruction Method is required for products sold in Russia                                                                                                                                                                                                                           | The error occurs if a Target Market in Product Master Data for the decommissioned or destroyed product = "RU", but the source is empty or null.                                                                                                                                                                                                                                                                   |                    |
| tl:fundingSource          | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU                                                                                                                                                                                            | The error occurs if both tl:shipToCountryCode and tl:shipFromCountryCode = "RU", but the source is empty or null.                                                                                                                                                                                                                                                                                                 |                    |
| tl:salesDistributionType  | Serial Numbers with Recalled status cannot be shipped.                                                                                                                                                                                                                               | The error occurs if salesDistrubutionType = INCOUNTRYSALE or EXPORTSALE for sales shipments, but one or more serial numbers have a Recalled reason code.                                                                                                                                                                                                                                                          |                    |
| tl:shipFromCountryCode    | Serialized Operations Manager Shipment inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified.                                                                      | The error occurs if the sourceList and destinationList are both omitted, and tl:shipToCountryCode and tl:ShipFromCountrycode are empty or null.                                                                                                                                                                                                                                                                   |                    |
| tl:shipToCountryCode      |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |

| Data Element                                                                                                                                                      | Error Message                                                                                                | Description                                                                                                                                    | Inbound / Outbound |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| tl:transactionIdentifier   @date                                                                                                                                  | Order Item Transaction Identifier Date is required if Ship To Country Code = RU                              | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                               |                    |
| tl:unitPrice                                                                                                                                                      | Unit Price is required if Ship To Country Code is RU and Ship From Country Code is any of RU, AM, BY, KZ, KG | The error occurs if tl:shipToCountryCode = "RU" and tl:shipFromCountryCode = "AM", "BY", "KG", "KZ", or "RU", but the source is empty or null. |                    |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                              |                                                                                                                                                |                    |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                              |                                                                                                                                                |                    |

## ESM Shipment (XML)

### Guidelines

Use this message for any type of shipment (i.e. sale, transfer, or return). This message can contain optional commissioning and aggregation data, in addition to the required shipping data.



- When product changes ownership from an MAH, or a CMO or 3PL acting on behalf of an MAH, to another entity, an outbound shipment is generated and the serial numbers are put into a **shipped** state.
- When product is moving between locations (i.e. not a change of ownership) working on behalf of an MAH, an inbound shipment is generated and the serial numbers are put into a **pending receipt** state.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_ESM\_SHIPMENT

**Info Exchange Display Name:** ESM Shipment

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Date Element                |                       |                        | Occurs Length  | Format | Description                                                                                                                                                                                                                                                                                                  |
|-----------------------------|-----------------------|------------------------|----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| som:SOMSalesShipmentMessage |                       |                        | 1...1<br>-     | -      | <b>Required.</b> Root element of message.                                                                                                                                                                                                                                                                    |
|                             | som:ControlFileHeader |                        | 1...1<br>-     | -      | <b>Required.</b> The message document's header information.                                                                                                                                                                                                                                                  |
|                             |                       | cmn:FileSenderNumber   | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup>                                                                                                                                                                                                                                   |
|                             |                       | cmn:FileReceiverNumber | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's recipient. <sup>2</sup>                                                                                                                                                                                                                                |
|                             |                       | cmn:FileControlNumber  | 1...1<br>1/20  | String | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>3</sup>                                                                                                                                                                           |
|                             |                       | cmn:FileDate           | 1...1<br>10/10 | Date   | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>4</sup>                                                                                                                                                                                         |
|                             |                       | cmn:FileTime           | 1...1<br>9/9   | Time   | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the Z to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the Z. <sup>5</sup>                                                                                  |
|                             | som:MessageBody       |                        | 1...1<br>-     | -      | <b>Required.</b> Main body of message.                                                                                                                                                                                                                                                                       |
|                             |                       | cmn:LocationId         | 0...1<br>0/34  | String | Specifies the facility/warehouse identifier to scope the Sales Shipment Status update for the serial numbers matching the specified item code and lot number. <sup>6</sup><br>If the location is omitted, the Sales Shipment status update is applied globally to all matching serial numbers in the system. |

<sup>1</sup>8888882028655<sup>2</sup>8888882028677<sup>3</sup>0000000001<sup>4</sup>2012-06-30<sup>5</sup>06:30:32Z<sup>6</sup>8888882028655

| Date Element |  |                            | Occurs Length | Format  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|----------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:DeliveryNumber         | 1...1<br>1/*  | String  | <b>Required.</b> Links the order information to the serialized receive information for this customer delivery. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  | cmn:DeliveryCompleteFlag   | 0...1<br>1/*  | Boolean | <p><b>Required.</b> Instructs TraceLink to process the outbound delivery, update the status of all serial numbers and sub-child aggregations to shipped, and trigger generation of regulatory reporting messages based on customer configuration.<sup>2</sup></p> <p>If all of the information (order detail and received serial numbers) is in a single message, the delivery complete flag is set to <b>true</b>.</p> <p>If only partial information is in the message (e.g. order detail only, received items sent incrementally, etc.) the delivery complete flag is set to <b>false</b> for all intermediate messages, and then set to true when the delivery is complete and all information has been communicated to TraceLink.</p> <p> Values must be lower case only. True or TRUE will throw an error.</p> |
|              |  | som:OrderDetails           | 0...1<br>-    | -       | Includes business transaction identifier and date, order item receive list, and sender and recipient information. This element is mandatory before the delivery complete flag can be set, though it can be communicated at any time (e.g. with, before, or after the received serial numbers have been communicated).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  | cmn:DisaggregateFromParent | 0...1<br>0/*  | Boolean | <p>When set to <b>true</b> instructs the system to disaggregate the picked serial number from the parent container, if it is aggregated. If not set, or set to <b>false</b>, the system will operate in default mode, which is to generate an error if attempting to pick serial number for an item or container that is aggregated to a parent.<sup>3</sup></p> <p> Values must be lower case only. True or TRUE will throw an error.</p>                                                                                                                                                                                                                                                                                                                                                                          |
|              |  | cmn:CorrectiveShipment     | 0...1<br>0/*  | Boolean | <p>Indicates that a new Serialized Operations Manager Shipment is correcting a previously voided Serialized Operations Manager Shipment message. Default value is <b>false</b>, which indicates that it is not a corrective shipment.<sup>4</sup></p> <p> Values must be lower case only. True or TRUE will throw an error.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>4520010<sup>2</sup>true<sup>3</sup>true<sup>4</sup>false

| Date Element |  |  |                            | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|----------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:OriginalDeliveryNumber | 0...1<br>0/*  | String | Records original delivery number that is replaced when shipment is and corrections are made to delivery. <sup>1</sup>                                                                                                                                                                                                                             |
|              |  |  | cmn:EntryPort              | 0...1<br>0/*  | String | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                          |
|              |  |  | cmn:ExitPort               | 0...1<br>0/*  | String | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                           |
|              |  |  | cmn:TransactionIdentifier  | 1...*<br>1/*  | String | <b>Required.</b> Identifier that associates with the received serial numbers, for regulatory reporting purposes. <sup>2</sup><br>At least one transaction id is mandatory.                                                                                                                                                                        |
|              |  |  | @type                      | 1...*<br>1/*  | String | <b>Required.</b> The transaction identifier type using supported enumeration values (e.g. ASN, PO, RETURN). <sup>3</sup><br>See the <a href="#">TransactionId</a> enumeration list for valid values.                                                                                                                                              |
|              |  |  | @date                      | 0...1<br>0/*  | Date   | The transaction identifier date. <sup>4</sup>                                                                                                                                                                                                                                                                                                     |
|              |  |  | cmn:TransactionDate        | 1...1<br>1/*  | Date   | <b>Required.</b> The date of the transaction in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                                                                                                   |
|              |  |  | cmn:TransactionTime        | 0...1<br>0/*  | Time   | The time of the transaction in HH:MM:SS format. <sup>6</sup>                                                                                                                                                                                                                                                                                      |
|              |  |  | cmn:ShipToCountryCode      | 1...1<br>2/2  | String | <b>Required.</b> ISO country code for ship to country. Provides application with the information it needs to trigger regulatory reporting in response to relevant events. <sup>7</sup>                                                                                                                                                            |
|              |  |  | cmn:ShipFromCountryCode    | 0...1<br>2/2  | String | <b>Conditionally required</b> if the product is being exported from country (e.g. when <b>cmn:ReceiptDistributionType</b> = EXPORTSALE, EXPORTTRANSFER, or EXPORTRETURN). ISO country code for ship from country. Provides application with the information it needs to trigger regulatory reporting in response to relevant events. <sup>8</sup> |

<sup>1</sup>8457512<sup>2</sup>P0303005<sup>3</sup>PO<sup>4</sup>2019-03-30<sup>5</sup>2016-06-30<sup>6</sup>02:28:55Z<sup>7</sup>US<sup>8</sup>IN

| Date Element |  |  |                           | Occurs Length | Format  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|---------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:SalesDistributionType | 0...1<br>1/*  | String  | <p><b>Required.</b> Advises the application of sale (change of ownership of the product) and transfer (no change of ownership of product, but physical movement of product) for application and regulatory reporting purposes. The actual triggering of regulatory reporting is governed by the configuration in TraceLink.<sup>1</sup></p> <p><b>INCOUNTRYTRANSFER</b> and <b>EXPORTTRANSFER</b> include:</p> <ul style="list-style-type: none"> <li>• Intra-company warehouse transfer of goods.</li> <li>• Transfers between Pharmaceutical Manufacturer and 3PL.</li> <li>• Transfers between Pharmaceutical Manufacturer and CMO/CPO.</li> <li>• Transfers between CMO/CPO and 3PL of Pharmaceutical Manufacturer.</li> </ul> <p> Setting this value alone does not trigger regulatory reporting.</p> <p>See the <a href="#">SalesDistType</a> enumeration list for valid values.</p> |
|              |  |  | cmn:SupplyType            | 0...1<br>1/*  | String  | <p>Identifies the type of supply that is being performed using a valid value from the enumerations list.</p> <p>See the <a href="#">SupplyType</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | cmn:ContractType          | 0...1<br>1/*  | String  | <p>Identifies the type of contract for the sale of goods using a valid value from the enumerations list.</p> <p>See the <a href="#">ContractType</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | cmn:Comments              | 0...1<br>0/*  | String  | Optional remarks or comments regarding delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | cmn:DropShipment          | 0...1<br>0/*  | Boolean | <p>Indicates if shipment is a drop shipment.<sup>2</sup></p> <p> Values must be lower case only. True or TRUE will throw an error.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | cmn:ContractNumber        | 0...1<br>0/*  | String  | Identification number of the contract. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>INCOUNTRYSALE<sup>2</sup>false<sup>3</sup>1234567

| Date Element |  |  |                            |                                 | Occurs Length  | Format  | Description                                                                                                                                                                                                                                                                                    |
|--------------|--|--|----------------------------|---------------------------------|----------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:FundingSource          |                                 | 0...1<br>0/*   | String  | Source of the funding. <sup>1</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                                                |
|              |  |  | cmn:DeliveryInspection     |                                 | 0...1<br>0/*   | String  | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                            |
|              |  |  | cmn:DeliveryInspectionDate |                                 | 0...1<br>10/10 | Date    | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                             |
|              |  |  | cmn:DeliveryInspectionNote |                                 | 0...1<br>0/*   | String  | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                            |
|              |  |  | cmn:RemovalFromCirculation |                                 | 0...1<br>0/*   | String  | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                      |
|              |  |  | cmn:AggregationInspection  |                                 | 0...1<br>0/*   | String  | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                       |
|              |  |  | cmn:OrderItemList          |                                 | 0...1<br>-     | -       | Order item list group is populated to communicate the expected receive quantities for each item code at the EACH (unit) level. This information is used to verify the actual serial number received, the correct product, the correct lot number (if provided), and the correct each quantity. |
|              |  |  |                            | cmn:AllowShortVerificationCount | 0...1<br>0/*   | Boolean | When set to <b>true</b> , allows the count to come up short without an error. If set to <b>false</b> , an error is thrown if the count does not match what is expected. <sup>3</sup>                                                                                                           |
|              |  |  |                            | cmn:OrderItem                   | 1...*<br>-     | -       | <b>Required.</b> Order item group is a repeating element that captures the item code, lot number, and quantity for each item that will be received for the order. Each unique item code and lot number are communicated in a separate order item group.                                        |
|              |  |  |                            | cmn:OrderItemNumber             | 0...1<br>0/*   | String  | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                  |
|              |  |  |                            | choice%1                        | 1...1<br>-     | Choice  | <b>Required.</b> Mandatory choice. Populate only one of <b>cmn:InternalMaterialCode</b> or <b>cmn:PackagingItemCode</b> . One of the two options must be present.                                                                                                                              |

<sup>1</sup>FederalBudgetFunds<sup>2</sup>2021-12-21<sup>3</sup>true



| Date Element |  |  |  |  |                          | Occurs Length | Format  | Description                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:InternalMaterialCode | 0...1<br>1/*  | String  | <p><b>Required.</b> Option 1 for choice%1 in <b>cmn:OrderItem</b>. Use to identify the product using the internal material number configured in Product Master Data.<sup>1</sup></p> <p> Mandatory if cmn:PackagingItemCode is not populated.</p>                                |
|              |  |  |  |  | cmn:PackagingItemCode    | 0...1<br>0/*  | String  | <p><b>Required.</b> Option 2 for choice%1 in <b>cmn:OrderItem</b>. Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data.<sup>2</sup></p> <p> Mandatory if cmn:InternalMaterialCode is not populated.</p>             |
|              |  |  |  |  | @type                    | 0...1<br>1/*  | String  | <p><b>Required.</b> The product code type for the packaging item code using the supported enumeration values (e.g. GTIN-14).<sup>3</sup></p> <p> Mandatory if cmn:PackagingItemCode is populated.</p> <p>See the <a href="#">ItemCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  | cmn:LotNumber            | 0...1<br>0/*  | String  | The lot or batch code for the items to be received (if available) in an alphanumeric string. <sup>4</sup>                                                                                                                                                                                                                                                           |
|              |  |  |  |  | cmn:ExpirationDate       | 0...1<br>0/*  | Date    | Expiration date for product in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:Quantity             | 1...1<br>1/*  | Integer | <b>Required.</b> The quantity of items at the EACH (unit) level of the item code and lot if specified to be received. <sup>6</sup>                                                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:UnitPrice            | 0...1<br>-    | Decimal | <b>Required.</b> The unit price of an item. <sup>7</sup>                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>100253<sup>2</sup>00882026030229<sup>3</sup>GTIN-14<sup>4</sup>A12345<sup>5</sup>2018-08-15<sup>6</sup>480<sup>7</sup>142478.20

| Date Element |  |  |  |                           |               | Occurs Length | Format  | Description                                                                                                                                                                                                                                      |
|--------------|--|--|--|---------------------------|---------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                           | @currencyCode | 1...1<br>0/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>1</sup>                                                                                                                                                                      |
|              |  |  |  | cmn:VAT                   |               | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>2</sup>                                                                                                                                                                                                           |
|              |  |  |  |                           | @currencyCode | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>3</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                            |
|              |  |  |  | cmn:GrossPrice            |               | 0...1<br>-    | Decimal | Gross price including unit price and all taxes and fees. <sup>4</sup>                                                                                                                                                                            |
|              |  |  |  |                           | @currencyCode | 1...1<br>3/3  | String  | <b>Required. Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>5</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                  |
|              |  |  |  | cmn:IsSerialized          |               | 0...1<br>-    | Boolean | Indicates if item is not serialized. <sup>6</sup><br><br> If omitted, and OrderItem exists, defaults value to "true".                                         |
|              |  |  |  | cmn:TransactionIdentifier |               | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>7</sup>                                                                                                                     |
|              |  |  |  |                           | @type         | 1...1<br>1/*  | String  | <b>Required.</b><br>The transaction identifier type. Valid values:<br><ul style="list-style-type: none"> <li>• <b>DESTRUCTION</b></li> <li>• <b>INVOICE</b></li> <li>• <b>NOTAFISCAL</b></li> <li>• <b>OTHER</b></li> <li>• <b>PO</b></li> </ul> |

<sup>1</sup>KRW<sup>2</sup>152.22<sup>3</sup>USD<sup>4</sup>USD<sup>5</sup>USD<sup>6</sup>false<sup>7</sup>PO303005

| Date Element |  |  |                |                               |                |  | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|----------------|-------------------------------|----------------|--|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                |                               |                |  |               |        | <ul style="list-style-type: none"> <li><a href="#">RETURN</a></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |                |                               | @date          |  | 0...*<br>0/*  | Date   | <b>Required.</b> The transaction identifier date. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | cmn:SenderInfo |                               |                |  | 1...1<br>-    | -      | <b>Required.</b> Information about the supply chain partner that is sending the shipment. Contains XML choice elements of <b>cmn:FromBusinessParty</b> and <b>cmn:ShipFromLocation</b> that govern whether to use master data lookup to populate the address, license, and contact elements. Only one option in choice%1 may be populated.                                                                                                                                                                                        |
|              |  |  |                | choice%1                      |                |  | 1...1<br>-    | Choice | <b>Required.</b> Mandatory choice. <ul style="list-style-type: none"> <li>Option 1: Contains only <b>cmn:FromBusinessPartyLookupId</b>. <ul style="list-style-type: none"> <li>Populate this element only if master data lookup is desired.</li> </ul> </li> <li>Option 2: Contains full <b>cmn:FromBusinessPartyInfo</b> business address the customer populates directly in the interface. <ul style="list-style-type: none"> <li>Populate this element fully only if master data lookup is not desired.</li> </ul> </li> </ul> |
|              |  |  |                | cmn:FromBusinessPartyLookupId |                |  | 0...1<br>1/*  | String | <b>Required.</b> Option 1 for <b>cmn:SenderInfo</b> choice%1 group. <sup>2</sup><br>A lookup identifier associated with the sold-from business entity. This value is used as the lookup key in master data to populate the details in <b>cmn:FromBusinessPartyInfo</b> . <div>  If omitted, and <b>cmn:OrderItem</b> exists, defaults value to <a href="#">true</a>. </div>                                                                    |
|              |  |  |                |                               | @type          |  | 1...1<br>1/*  | String | <b>Conditionally required</b> if full business address is not provided in <b>cmn:FromBusinessPartyInfo</b> option. The type of the sold from business entity identifier from the provided enumeration list. <sup>3</sup><br>See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                           |
|              |  |  |                | cmn:FromBusinessPartyInfo     |                |  | 0...1<br>-    | -      | <b>Conditionally required</b> standalone cmn:FromBusinessPartyLookupId option to leverage master data lookup is not used. Option 2 for <b>cmn:SenderInfo</b> choice%1 group.<br>The full business information associated with the sold from business entity.                                                                                                                                                                                                                                                                      |
|              |  |  |                |                               | cmn:BusinessId |  | 1...*<br>1/*  | String | <b>Required.</b> The identifier associated with the sold from business entity. Mandatory for regulatory reporting. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>2019-03-30<sup>2</sup>115740<sup>3</sup>COMPANYID<sup>4</sup>8888882028677

| Date Element |  |  |  |  |                            | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|----------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | @type                      | 1...1<br>1/*  | String | <p><b>Required.</b> The type of the BusinessId identifier.<sup>1</sup></p> <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  |  |  |  | cmn:BusinessClassification | 0...1<br>0/*  | String | <p>Business classification.<sup>2</sup></p> <p>See the <a href="#">BusinessClassification</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:BusinessInfo           | 0...1<br>-    | -      | Populates with the business name and address of the sold from business entity.                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | cmn:BusinessName           | 1...1<br>1/*  | String | <b>Required.</b> The business name of the trading partner. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Street1                | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:Street2                | 0...1<br>0/*  | String | The second line of the street address. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:City                   | 1...1<br>1/*  | String | <b>Required.</b> The city. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the                                                                                                                                                                                                                                                                     |

<sup>1</sup>GLN<sup>2</sup>MANUFACTURER<sup>3</sup>Kendall Pharma<sup>4</sup>300 Trade Center<sup>5</sup>Suite 7690<sup>6</sup>Woburn

| Date Element |  |  |  |  |                         | Occurs Length | Format | Description                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|-------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                         |               |        | building, house, or unit number in <b>Street1</b> .                                                                                                                                                                                                            |
|              |  |  |  |  | cmn:Township            | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                          |
|              |  |  |  |  | cmn:District            | 0...1<br>0/*  | String | District Code.<br><br> Must be a 3-digit numeric code.                                                                                                                      |
|              |  |  |  |  | cmn:StateOrRegion       | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>1</sup>                                                                                                 |
|              |  |  |  |  | cmn:PostalCode          | 1...1<br>1/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>2</sup>                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>3</sup>                                                                                                                         |
|              |  |  |  |  | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                            |
|              |  |  |  |  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F.         |
|              |  |  |  |  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                         |
|              |  |  |  |  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                          |

<sup>1</sup>MA<sup>2</sup>01801<sup>3</sup>US

| Date Element |  |  |  |                              | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|------------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | choice%2                     | 0...1<br>-    | Choice | Optional choice element (no error if neither are present): <ul style="list-style-type: none"> <li>Option 1: Contains only the <b>cmn:ShipFromLocationLookupId</b>. <ul style="list-style-type: none"> <li>Populate this element only if master data lookup is desired.</li> </ul> </li> <li>Option 2: Contains full <b>cmn:ShipFromLocationInfo</b> business address fielded data that will be populated by the customer directly in the interface. <ul style="list-style-type: none"> <li>Populate this element fully only if master data lookup is not desired.</li> </ul> </li> </ul> |
|              |  |  |  | cmn:ShipFromLocationLookupId | 0...1<br>1/*  | String | Option 1 for <b>cmn:SenderInfo</b> choice%2 group. <sup>1</sup><br>A lookup identifier associated with the ship from location. Use this value as the lookup key in master data to populate the details in <b>cmn:ShipFromLocationInfo</b> .                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | @type                        | 1...1<br>1/*  | String | <b>Required.</b> The type of the ship from location identifier using the enumeration list. <sup>2</sup><br><br><div>  Mandatory if full business address is not provided in <b>cmn:ShipFromLocationInfo</b> option. </div><br>See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                                                                             |
|              |  |  |  | cmn:ShipFromLocationInfo     | 0...1<br>-    | -      | <b>Required.</b> Option 2 for <b>cmn:SenderInfo</b> choice%2 group.<br>The full business information associated with the ship from location is provided directly.                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | cmn:FacilityId               | 1...*<br>1/*  | String | <b>Required.</b> Ship from location identifier. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | @type                        | 1...1<br>1/*  | String | <b>Required.</b> The type of the FacilityId identifier. <sup>4</sup><br><br><div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                  |

<sup>1</sup>1056231<sup>2</sup>COMPANYSITEID<sup>3</sup>8888882028655<sup>4</sup>GLN

| Date Element |  |  |  |  |                   | Occurs Length | Format | Description                                                                                                                                                                                                                              |
|--------------|--|--|--|--|-------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:LocationInfo  | 0...1<br>-    | -      | Business name and address of the ship from location.                                                                                                                                                                                     |
|              |  |  |  |  | cmn:BusinessName  | 1...1<br>1/*  | String | <b>Required.</b> The business name of the trading partner. <sup>1</sup>                                                                                                                                                                  |
|              |  |  |  |  | cmn:Street1       | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address. <sup>2</sup>                                                                                                                                                                      |
|              |  |  |  |  | cmn:Street2       | 0...1<br>0/0* | String | The second line of the street address.                                                                                                                                                                                                   |
|              |  |  |  |  | cmn:City          | 1...1<br>1/*  | String | <b>Required.</b> The city. <sup>3</sup>                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Village       | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber   | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> . |
|              |  |  |  |  | cmn:Township      | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District      | 0...1<br>0/*  | String | District Code.<br><div> Must be a 3-digit numeric code.</div>                                                                                         |
|              |  |  |  |  | cmn:StateOrRegion | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>4</sup>                                                                           |
|              |  |  |  |  | cmn:PostalCode    | 1...1<br>1/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>5</sup>                                                                                                                                                                              |

<sup>1</sup>Rx Logistics<sup>2</sup>1 Distribution Drive<sup>3</sup>Memphis<sup>4</sup>TN<sup>5</sup>13184

| Date Element |  |  |  |  |                         | Occurs Length | Format | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|-------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>1</sup>                                                                                                                                   |
|              |  |  |  |  | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div>       |
|              |  |  |  |  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div> |
|              |  |  |  |  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                    |
|              |  |  |  |  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                     |
|              |  |  |  |  | cmn:LicenseNumber       | 0...1<br>0/*  | String | Populate with the license number of the facility. This element may be repeated to include as many license numbers as required (e.g. state and federal license). <sup>2</sup>                                                                                              |
|              |  |  |  |  | @state                  | 0...1<br>0/*  | String | <b>Required.</b> The state or region in which the trading partner is licensed, using the standard two letter abbreviation specified in ISO 3166-2:1998 country sub-division code. Used to give additional context to the license number. <sup>3</sup>                     |
|              |  |  |  |  | @agency                 | 0...1<br>0/*  | String | <b>Required.</b> The agency that granted the license (e.g. Florida DOH, NABP). Used to give additional context to the license number. <sup>4</sup>                                                                                                                        |
|              |  |  |  |  | cmn:ContactInfo         | 0...1<br>-    | -      | Contact information for use by downstream trading partners to authenticate (e.g. verify) the message information recorded on the pedigree with the sender party.                                                                                                          |

<sup>1</sup>US<sup>2</sup>8888800003604<sup>3</sup>TN<sup>4</sup>MBOP



| Date Element |  |  |                  |                             |               | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|------------------|-----------------------------|---------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                  |                             | cmn:Name      | 0...1<br>0/*  | String | <b>Required.</b> Name of the contact department or individual at the company. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |                  |                             | cmn:Title     | 0...1<br>0/*  | String | Title of the individual if a person was provided in <b>cmn:Name</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |                  |                             | cmn:Telephone | 1...1<br>1/*  | String | <b>Required.</b> Phone number of the contact department or individual at the company. Must begin with the + character followed by the Country Calling Code. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |                  |                             | cmn:Email     | 0...1<br>0/*  | String | Email address of the contact department or individual at the company. Should be included if available. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |                  |                             | cmn:Url       | 0...1<br>0/*  | String | The Web address to facilitate authentication. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | cmn:ReceiverInfo |                             |               | 1...1<br>-    | -      | <b>Required.</b> Information about the supply chain partner that is receiving the shipment. ReceiverInfo contains XML choice elements for <b>cmn:ToBusinessParty</b> and <b>cmn:ShipToLocation</b> that govern whether to use master data lookup to populate the address, license, and contact elements. Only one option in choice%1 may be populated.                                                                                                                                                                                                                                            |
|              |  |  |                  | choice%1                    |               | 1...1<br>-    | Choice | <b>Required.</b> Mandatory choice element. One and only one option must be selected. <ul style="list-style-type: none"> <li>Option 1: Contains only the <b>cmn:ToBusinessPartyLookupId</b>. <ul style="list-style-type: none"> <li>Populate this element only if master data lookup is desired.</li> </ul> </li> <li>Option 2: Contains full <b>cmn:ToBusinessPartyInfo</b> business address field data populated by the customer directly in the interface. <ul style="list-style-type: none"> <li>Populate this element fully only if master data lookup is not desired.</li> </ul> </li> </ul> |
|              |  |  |                  | cmn:ToBusinessPartyLookupId |               | 0...1<br>1/*  | String | Option 1 for <b>cmn:ReceiverInfo</b> choice%1 group. <sup>5</sup><br>A lookup identifier associated with the sold to business entity. Use this value as the lookup key in master data to populate the details in <b>cmn:ToBusinessPartyInfo</b> .                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>Customer Service<sup>2</sup>+1-781-555-5624<sup>3</sup>support@kendallpharma.com<sup>4</sup><https://www.kendallpharma.com/authenticate><sup>5</sup>13655

| Date Element |  |  |  |                         |                            | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|-------------------------|----------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                         | @type                      | 1...1<br>1/*  | String | <b>Conditionally required</b> if full business address is not provided in <b>cmn:ToBusinessPartyInfo</b> .<br>The type of the sold to business entity identifier from the provided enumeration list. <sup>1</sup><br>See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                 |
|              |  |  |  | cmn:ToBusinessPartyInfo |                            | 0...1<br>-    | -      | <b>Required.</b> Option 2 for <b>cmn:ReceiverInfo</b> choice%1 group.<br>The full business information associated with the sold to business entity is provided.                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |                         | cmn:BusinessId             | 1...*<br>1/*  | String | <b>Required.</b> The return to business entity identifier. Mandatory for regulatory reporting. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |                         | @type                      | 1...1<br>1/*  | String | <b>Required.</b> The type of the <b>cmn:BusinessId</b> identifier. <sup>3</sup><br><br><div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |
|              |  |  |  |                         | cmn:BusinessClassification | 0...1<br>0/*  | String | Business classification. <sup>4</sup><br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |                         | cmn:BusinessInfo           | 0...1<br>-    | -      | The sold to business entity business name and address.                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |                         | cmn:BusinessName           | 1...1<br>1/*  | String | <b>Required.</b> The business name of the trading partner. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |                         | cmn:Street1                | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |                         | cmn:Street2                | 0...1         | String | The second line of the street address.                                                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>COMPANYID<sup>2</sup>3333331013655<sup>3</sup>GLN<sup>4</sup>DISTRIBUTOR<sup>5</sup>Wholesale Inc<sup>6</sup>555 Neelan Road

| Date Element |  |  |  |  |  | Occurs Length         | Format       | Description |                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|--|-----------------------|--------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                       |              |             |                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | cmn:City              | 1...1<br>1/* | String      | <b>Required.</b> The city. <sup>1</sup>                                                                                                                                                                                                                      |
|              |  |  |  |  |  | cmn:Village           | 0...1<br>0/* | String      | Name of the village in which the company is located.                                                                                                                                                                                                         |
|              |  |  |  |  |  | cmn:HouseNumber       | 0...1<br>0/* | String      | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                     |
|              |  |  |  |  |  | cmn:Township          | 0...1<br>0/* | String      | Name of the township in which the company is located.                                                                                                                                                                                                        |
|              |  |  |  |  |  | cmn:District          | 0...1<br>0/* | String      | District Code. <div> Must be a 3-digit numeric code.</div>                                                                                                                |
|              |  |  |  |  |  | cmn:StateOrRegion     | 1...1<br>1/* | String      | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>2</sup>                                                                                               |
|              |  |  |  |  |  | cmn:PostalCode        | 1...1<br>1/* | String      | <b>Required.</b> The ZIP or other postal code. <sup>3</sup>                                                                                                                                                                                                  |
|              |  |  |  |  |  | cmn:Country           | 1...1<br>1/* | String      | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>4</sup>                                                                                                                      |
|              |  |  |  |  |  | cmn:CorporateFax      | 0...1<br>0/* | String      | Company fax number.                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | cmn:AddressObjectGUID | 0...1<br>0/* | String      | The global identifier assigned by the Russian Federation Information Address System (FIAS). <div> Maximum of 36 characters, using the digits 0-9 and letters A-F.</div> |
|              |  |  |  |  |  | cmn:HouseGUID         | 0...1        | String      | The global house identifier assigned by the Russian Federation Information Address System                                                                                                                                                                    |

<sup>1</sup>Sacramento<sup>2</sup>CA<sup>3</sup>95833<sup>4</sup>US

| Date Element |  |  |  |          |                            | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|----------|----------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |                            |               |        | (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div>                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |          | cmn:TaxRegistrationCode    | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |          | cmn:PremisesCode           | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | choice%2 |                            | 0...1<br>-    | Choice | <ul style="list-style-type: none"> <li>Option 1: Contains only the <b>cmn:ShipToLocationLookupId</b>. <ul style="list-style-type: none"> <li>Populate this element only if master data lookup is desired.</li> </ul> </li> <li>Option 2: Contains full <b>cmn:ShipToLocationInfo</b> business address field data populated by the customer directly in the interface. <ul style="list-style-type: none"> <li>Populate this element fully only if master data lookup is not desired.</li> </ul> </li> </ul> |
|              |  |  |  |          | cmn:ShipToLocationLookupId | 0...1<br>0/*  | String | <b>Required.</b> Option 1 for <b>cmn:ReceiverInfo</b> choice%2 group. <sup>1</sup><br>A lookup identifier associated with the ship to location using the enumeration list. Use this value as the lookup key in master data to populate the details in <b>cmn:ShipToLocationInfo</b> .                                                                                                                                                                                                                      |
|              |  |  |  |          | @type                      | 1...1<br>0/*  | String | <b>Required.</b> The type of the ship to location identifier. <sup>2</sup><br>See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |          | cmn:ShipToLocationInfo     | 0...1<br>-    | -      | <b>Required.</b> Option 2 for <b>cmn:ReceiverInfo</b> choice%2 group.<br>The full business information associated with the ship to location is provided directly.                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |          | cmn:FacilityId             | 1...*<br>1/*  | String | <b>Required.</b> Populated with the ship from location identifier. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |          | @type                      | 1...1<br>1/*  | String | <b>Required.</b> The type of the <b>cmn:FacilityId</b> identifier. <sup>4</sup><br><br><div>  Only one of the following values may be used per message: </div>                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>1056231<sup>2</sup>COMPANYSITEID<sup>3</sup>3333331013655<sup>4</sup>GLN

| Date Element |  |  |  |  |                  | Occurs Length | Format | Description                                                                                                                                                                                                                              |
|--------------|--|--|--|--|------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                  |               |        | <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                       |
|              |  |  |  |  | cmn:LocationInfo | 0...1<br>-    | -      | Populated with the business name and address of the ship to location.                                                                                                                                                                    |
|              |  |  |  |  | cmn:BusinessName | 1...1<br>1/*  | String | <b>Required.</b> The business name of the trading partner. <sup>1</sup>                                                                                                                                                                  |
|              |  |  |  |  | cmn:Street1      | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address. <sup>2</sup>                                                                                                                                                                      |
|              |  |  |  |  | cmn:Street2      | 0...1<br>0/*  | String | The second line of the street address.                                                                                                                                                                                                   |
|              |  |  |  |  | cmn:City         | 1...1<br>1/*  | String | <b>Required.</b> The city. <sup>3</sup>                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Village      | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber  | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> . |
|              |  |  |  |  | cmn:Township     | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District     | 0...1<br>0/*  | String | <p>District Code.</p> <p> Must be a 3-digit numeric code.</p>                                                                                       |

<sup>1</sup>Wholesale Inc<sup>2</sup>555 Neelan Road<sup>3</sup>Sacramento

| Date Element |  |  |  |                   |                         | Occurs Length | Format | Description                                                                                                                                                                                                                                           |
|--------------|--|--|--|-------------------|-------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                   | cmn:StateOrRegion       | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>1</sup>                                                                                        |
|              |  |  |  |                   | cmn:PostalCode          | 1...1<br>1/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>2</sup>                                                                                                                                                                                           |
|              |  |  |  |                   | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>3</sup>                                                                                                               |
|              |  |  |  |                   | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                   |
|              |  |  |  |                   | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br>ⓘ Maximum of 36 characters, using the digits 0-9 and letters A-F.                                                                                  |
|              |  |  |  |                   | cmn:HouseGUID           | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).<br><br>ⓘ Maximum of 36 characters, using the digits 0-9 and letters A-F.                                                                            |
|              |  |  |  |                   | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                |
|              |  |  |  |                   | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                 |
|              |  |  |  | cmn:LicenseNumber |                         | 0...*<br>0/*  | String | Populate with the license number of the facility. This element may be repeated to include as many license numbers as required (e.g. state and federal license). <sup>4</sup>                                                                          |
|              |  |  |  |                   | @state                  | 0...1<br>0/*  | String | <b>Required.</b> The state or region in which the trading partner is licensed, using the standard two letter abbreviation specified in ISO 3166-2:1998 country sub-division code. Used to give additional context to the license number. <sup>5</sup> |

<sup>1</sup>CA<sup>2</sup>95833<sup>3</sup>US<sup>4</sup>3333300008701<sup>5</sup>CA

| Date Element |  |  |                 |                                  |       |         | Occurs Length | Format       | Description                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|-----------------|----------------------------------|-------|---------|---------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                 |                                  |       | @agency | 0...1<br>0/*  | String       | <b>Required.</b> The agency that granted the license (e.g. Florida DOH, NABP). Used to give additional context to the license number. <sup>1</sup>                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | cmn:CarrierInfo |                                  |       |         | 0...*<br>-    | -            | <b>Conditionally required</b> if <b>ShipToCountryCode</b> = <b>BR</b> . Information about the transportation partner that is transporting the shipment. <b>cmn:CarrierInfo</b> contains XML choice elements that govern whether master data lookup will be used to populate the address elements. Only one option in choice%1 may be populated.                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |                 | choice%1                         |       |         |               | 1...1<br>-   | Choice                                                                                                                                                                                                                                                                                                                                                                                              | Optional choice element: No error if neither are present. <ul style="list-style-type: none"><li>Option 1: Contains only the <b>cmn:CarrierBusinessPartyLookupId</b>.<ul style="list-style-type: none"><li>Populate this element <b>ONLY</b> if master data lookup is desired.</li></ul></li><li>Option 2: Contains full <b>cmn:CarreirBusinessPartyInfo</b> business address field data that will be populated by the customer directly in the interface.<ul style="list-style-type: none"><li>Populate this element fully <b>ONLY</b> if master data lookup is not desired.</li></ul></li></ul> |
|              |  |  |                 | cmn:CarrierBusinessPartyLookupId |       |         |               | 0...1<br>1/* | String                                                                                                                                                                                                                                                                                                                                                                                              | <b>Required.</b> Option 1 for <b>cmn:CarrierInfo</b> choice%1 group. <sup>2</sup><br>A lookup identifier associated with the Carrier entity from the enumeration list. This value is used as the lookup key in master data to populate the details in <b>cmn:CarrierBusinessPartyInfo</b> . <div> Mandatory if full business address not provided in <b>cmn:CarrierBusinessPartyInfo</b> option.</div>                                                                                                        |
|              |  |  |                 |                                  | @type |         | 1...1<br>1/*  | String       | <b>Required.</b> The type of the carrier business entity identifier from the provided enumeration list. <sup>3</sup> <div> Mandatory if full business address not provided in <b>cmn:CarrierBusinessPartyInfo</b> option.</div><br>See the <a href="#">BusinessLookupId</a> enumeration list for valid values. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |                 | cmn:CarrierBusinessPartyInfo     |       |         |               | 0...1<br>-   | -                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Required.</b> Option 2 for <b>cmn:CarrierInfo</b> choice%1 group.<br>The full business information associated with the transportation carrier business entity is provided.                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>BOP<sup>2</sup>13655<sup>3</sup>COMPANYID

| Date Element |  |  |  |                            | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|----------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                            |               |        |  Mandatory if standalone <b>cmn:CarrierBusinessPartyLookupId</b> option to leverage master data lookup is not populated.                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | cmn:BusinessId             | 1...*<br>1/*  | String | <b>Required.</b> The identifier associated with the transport carrier business entity. This value is mandatory for regulatory reporting. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | @type                      | 1...1<br>1/*  | String | <b>Required.</b> The identifier associated with the transport carrier business entity. This value is mandatory for regulatory reporting. <sup>2</sup> <div>  Only one of the following values may be used per message:           <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |
|              |  |  |  | cmn:BusinessClassification | 0...1<br>0/*  | String | N/A. <sup>3</sup><br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | cmn:BusinessInfo           | 0...1<br>-    | -      | Populate with the business name and address of the transportation carrier business entity.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | cmn:BusinessName           | 1...1<br>1/*  | String | <b>Required.</b> The business name of the trading partner. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | cmn:Street1                | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | cmn:Street2                | 0...1<br>0/*  | String | The second line of the street address.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>3333331013655<sup>2</sup>GLN<sup>3</sup>DISTRIBUTOR<sup>4</sup>Wholesale Inc<sup>5</sup>555 Neelan Road



| Date Element |  |  |  |  |                       | Occurs Length | Format | Description                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|-----------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:City              | 1...1<br>1/*  | String | <b>Required.</b> The city. <sup>1</sup>                                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Village           | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber       | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                 |
|              |  |  |  |  | cmn:Township          | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District          | 0...1<br>0/*  | String | District Code.<br><br> Must be a 3-digit numeric code.                                                                                                                |
|              |  |  |  |  | cmn:StateOrRegion     | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>2</sup>                                                                                           |
|              |  |  |  |  | cmn:PostalCode        | 1...1<br>1/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>3</sup>                                                                                                                                                                                              |
|              |  |  |  |  | cmn:Country           | 1...1<br>1/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>4</sup>                                                                                                                  |
|              |  |  |  |  | cmn:CorporateFax      | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:AddressObjectGUID | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |  | cmn:HouseGUID         | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).                                                                                                                                                        |

<sup>1</sup>Sacramento<sup>2</sup>CA<sup>3</sup>95833<sup>4</sup>US

| Date Element |  |                           |            |                  |                         | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|---------------------------|------------|------------------|-------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                           |            |                  |                         |               |        | <div> Maximum of 36 characters, using the digits 0-9 and letters A-F.</div>                                                                                                                                                                                                                                                                                                        |
|              |  |                           |            |                  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                                                                                                                                                                                                |
|              |  |                           |            |                  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                                                                                                                                                                                                 |
|              |  | cmn:WarehouseOperatorName |            |                  |                         | 0...1<br>0/*  | String | Name of the person responsible for warehouse operations. This element can be communicated at any time (e.g. with, before, or after the order details or received items have been communicated). <sup>1</sup>                                                                                                                                                                                                                                                          |
|              |  | som:AddPickedItems        |            |                  |                         | 0...1<br>-    | -      | List of serial numbers for the outermost handling units received for this delivery. TraceLink looks up the child aggregations of the serial numbers provided in the list and updates the container and all sub-child items with the received and subsequent shipped status. This element is mandatory before the delivery complete flag can be set, though it can be communicated at any time (e.g. with, before, or after the order details have been communicated). |
|              |  |                           | cmn:Serial |                  |                         | 0...*<br>1/*  | String | <b>Required.</b> Serial number of an outermost handling unit received for this delivery. One serial number is included per received container (or item if shipping loose items). This is typically a pallet or case serial number. <sup>2</sup>                                                                                                                                                                                                                       |
|              |  |                           |            | @format          |                         | 0...1<br>0/*  | String | Format of serial numbers.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |                           |            | @orderItemNumber |                         | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                                                                                                                                                                                         |
|              |  | som:RemoveUnpickedItems   |            |                  |                         | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |                           | cmn:Serial |                  |                         | 0...*<br>0/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |                           |            | @format          |                         | 0...1<br>0/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>John Smith<sup>2</sup>015088202501033321100000060001

| Date Element |  |                       |                       |                          |       | Occurs Length | Format       | Description                                                                              |           |
|--------------|--|-----------------------|-----------------------|--------------------------|-------|---------------|--------------|------------------------------------------------------------------------------------------|-----------|
|              |  | som:AddPickedLot      |                       |                          |       | 0...1<br>-    | -            | Not used.                                                                                |           |
|              |  |                       | cmn:ProductLotNumbers |                          |       |               | 0...*<br>-   | -                                                                                        | Not used. |
|              |  |                       |                       | choice%1                 |       |               | 0...1<br>-   | Choice                                                                                   | Not used. |
|              |  |                       |                       | cmn:InternalMaterialCode |       |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  |                       |                       | cmn:CountryDrugCode      |       |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  |                       |                       |                          | @type |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  |                       |                       | cmn:LotNumber            |       |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  | som:RemoveUnpickedLot |                       |                          |       | 0...1<br>-    | -            | Not used.                                                                                |           |
|              |  |                       | cmn:ProductLotNumbers |                          |       |               | 0...*<br>-   | -                                                                                        | Not used. |
|              |  |                       |                       | choice%1                 |       |               | 0...1<br>-   | Choice                                                                                   | Not used. |
|              |  |                       |                       | cmn:InternalMaterialCode |       |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  |                       |                       | cmn:CountryDrugCode      |       |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  |                       |                       |                          | @type |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  |                       |                       | cmn:LotNumber            |       |               | 0...1<br>0/* | String                                                                                   | Not used. |
|              |  | som:Aggregation       |                       |                          |       | 0...*         | -            | Communicate new aggregations created by the warehouse that are included in the shipment. |           |

| Date Element |  |  |                   | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|-------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                   |               |          | <p>The picked items will continue to include the top level container serial numbers and/or loose items.</p> <ul style="list-style-type: none"> <li>If the warehouse created a new aggregation (e.g. created a new pallet, created a new mixed case), the aggregation hierarchies created in the warehouse are communicated in this element.</li> <li>If an existing case is shipped, the case just needs to be scanned and the case hierarchy would not be provided.</li> <li>If a new mixed case is created, the hierarchy for the new case will be communicated. This enables the distribution warehouse to locally manage changes to aggregation hierarchies and communicate just the new hierarchies of the shipped goods at the time of shipment, without having to send disaggregation and aggregation events. The backend will perform the implicit disaggregate and aggregate operations to achieve the end state aggregation hierarchy prior to processing the shipment. The backend end will also auto-commission the SSCC numbers for new cases and pallets when these SSCC numbers are not yet commissioned.</li> </ul> |
|              |  |  | cmn:EventDateTime | 0...1<br>0/*  | DateTime | Timestamp of date/time of aggregation event with the UTC time zone indicator in format: YYYY-MM-DDTHH:MM:SS.ssZ. If not provided, current GMT date time will be used. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | cmn:EventLocation | 1...1<br>1/*  | String   | <b>Required.</b> Site-level SGLN of the location where the event occurred. SGLN format will be numeric component only, with urn prefix stripped (e.g. <code>8888882.02867.0</code> instead of <code>urn:epc:id:sgln:8888882.02867.0</code> typically found in EPCIS events). <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | cmn:ParentSerial  | 1...1<br>1/*  | String   | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI (01) (21) formatted serial number for GTINs-or-AI (00) formatted serial number for SSCCs. Non-GS1 serial numbers (e.g. China) are expressed in native format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | @companyPrefix    | 0...1<br>-    | -        | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  | @filterValue      | 0...1<br>-    | -        | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | @format           | 0...1         | String   | Format of serial numbers. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>2016-06-30T06:30:32Z<sup>2</sup>8888882.02867.0<sup>3</sup>00508820250103339763<sup>4</sup>AI(00)

| Date Element |  |  |                    |                  | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--------------------|------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                    |                  |               |        | See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                   |
|              |  |  |                    | @packedStatus    | 0...1<br>1/*  | String | Indicates the packaging status of the container (full, partial).<br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                         |
|              |  |  | cmn:PackagingLevel |                  | 0...1<br>0/*  | String | The packaging level of the commissioned items in <b>cmn:NumberList</b> .<br>See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                                               |
|              |  |  | cmn:NumberList     |                  | 1...1<br>1/*  | String | <b>Required.</b> List of serial numbers for the items packed into the parent serial number.                                                                                                                                                                                                         |
|              |  |  | cmn:Serial         |                  | 1...1<br>1/*  | String | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI (01) (21) formatted serial number for GTINs-or-AI (00) formatted serial number for SSCCs.Non-GS1 serial numbers (e.g. China) are expressed in native format. <sup>1</sup> |
|              |  |  |                    | @companyPrefix   | 0...1<br>-    | -      | The GS1 Company Prefix used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                     |
|              |  |  |                    | @filterValue     | 0...1<br>-    | -      | The filter value used in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                                           |
|              |  |  |                    | @format          | 0...1<br>1/*  | String | Attribute identifies format of serial numbers. <sup>2</sup><br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                    |
|              |  |  |                    | @packedStatus    | 0...1<br>1/*  | String | Indicates the packaging status of the container (full, partial).<br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                         |
|              |  |  |                    | @orderItemNumber | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:orderItem</b> .                                                                                                                                       |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMSalesShipmentMessage xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
```

<sup>1</sup>015088202501033321100000060001

<sup>2</sup>AI(01)+AI(21)

```

    <cmn:FileControlNumber>0000000001</cmn:FileControlNumber>
    <cmn:FileDate>2019-07-25</cmn:FileDate>
    <cmn:FileTime>21:46:32Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <cmn:LocationId>8888882025586</cmn:LocationId>
    <cmn:DeliveryNumber>4520010</cmn:DeliveryNumber>
    <cmn:DeliveryCompleteFlag>true</cmn:DeliveryCompleteFlag>
    <som:OrderDetails>
      <cmn:DisaggregateFromParent>true</cmn:DisaggregateFromParent>
      <cmn:CorrectiveShipment>false</cmn:CorrectiveShipment>
      <cmn:OriginalDeliveryNumber>8457512</cmn:OriginalDeliveryNumber>
      <cmn:EntryPort></cmn:EntryPort>
      <cmn:ExitPort></cmn:ExitPort>
      <cmn:TransactionIdentifier type="PO">P0303005</cmn:TransactionIdentifier>
      <cmn:TransactionDate>2019-07-25</cmn:TransactionDate>
      <cmn:TransactionTime>02:23:55</cmn:TransactionTime>
      <cmn:ShipToCountryCode>US</cmn:ShipToCountryCode>
      <cmn:ShipFromCountryCode>US</cmn:ShipFromCountryCode>
      <cmn:SalesDistributionType>INCOUNTRYSALE</cmn:SalesDistributionType>
      <cmn:SupplyType>MedicalCareDistribution</cmn:SupplyType>
      <cmn:ContractType>PrivateContract</cmn:ContractType>
      <cmn:Comments>Comments</cmn:Comments>
      <cmn:DropShipment>false</cmn:DropShipment>
      <cmn:ContractNumber>C107</cmn:ContractNumber>
      <cmn:FundingSource>OwnFunds</cmn:FundingSource>
      <cmn:RemovalFromCirculation></cmn:RemovalFromCirculation>
      <cmn:OrderItemList>
        <cmn:AllowShortVerificationCount>true</cmn:AllowShortVerificationCount>
        <cmn:OrderItem>
          <!-- EITHER InternalMateriaCode or PackagingItemCode, but not both -->
          <cmn:OrderItemNumber>708</cmn:OrderItemNumber>
          <cmn:PackagingItemCode type="GTIN-14">00882025503022</cmn:PackagingItemCode>
          <cmn:LotNumber>L007</cmn:LotNumber>
          <cmn:ExpirationDate>2019-07-25</cmn:ExpirationDate>
          <cmn:Quantity>500</cmn:Quantity>
          <cmn:UnitPrice currencyCode="USD">100.00</cmn:UnitPrice>
          <cmn:VAT currencyCode="USD">50.00</cmn:VAT>
          <cmn:GrossPrice currencyCode="USD">150.00</cmn:GrossPrice>
          <cmn:IsSerialized>false</cmn:IsSerialized>
        </cmn:OrderItem>
      </cmn:OrderItemList>
    </som:OrderDetails>
  </som:MessageBody>
</som:ControlFileHeader>

```

```

    <cmn:TransactionIdentifier type="PO" date="20109-07-25">PO85</cmn:TransactionIdentifier>
  </cmn:OrderItem>
</cmn:OrderItemList>
<cmn:SenderInfo>
  <cmn:FromBusinessPartyInfo>
    <cmn:BusinessId type="GLN">8779891013658</cmn:BusinessId>
    <cmn:BusinessId type="SGLN">9997777.01994.0</cmn:BusinessId>
    <cmn:BusinessClassification>MANUFACTURER</cmn:BusinessClassification>
    <cmn:BusinessInfo>
      <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>
      <cmn:BusinessType>Manufacturer</cmn:BusinessType>
      <cmn:Street1>10 Welsh St</cmn:Street1>
      <cmn:City>Malden</cmn:City>
      <cmn:Village></cmn:Village>
      <cmn:HouseNumber></cmn:HouseNumber>
      <cmn:Township></cmn:Township>
      <cmn:StateOrRegion>MA</cmn:StateOrRegion>
      <cmn:PostalCode>02148</cmn:PostalCode>
      <cmn:Country>US</cmn:Country>
      <cmn:CorporateFax></cmn:CorporateFax>
      <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000150</cmn:AddressObjectGUID>
      <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dba</cmn:HouseGUID>
      <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
      <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:BusinessInfo>
  </cmn:FromBusinessPartyInfo>
</cmn:SenderInfo>
<cmn:ReceiverInfo>
  <!-- EITHER ToBusinessPartyLookupId or ToBusinessPartyInfo, but not both -->
  <cmn:ToBusinessPartyLookupId type="COMPANYSITEID">122333</cmn:ToBusinessPartyLookupId>
  <!--
  <cmn:ToBusinessPartyInfo>
    <cmn:BusinessId type="">ToBusinessPartyInfo-BusinessId</cmn:BusinessId>
    <cmn:BusinessClassification></cmn:BusinessClassification>
    <cmn:BusinessInfo>
      <cmn:BusinessName>Grondin Pharmacy</cmn:BusinessName>
      <cmn:BusinessType>Pharmacy</cmn:BusinessType>
      <cmn:Street1>100 Main Street</cmn:Street1>
      <cmn:City>Portsmouth</cmn:City>
      <cmn:Village></cmn:Village>

```

```

        <cmn:HouseNumber></cmn:HouseNumber>
        <cmn:Township></cmn:Township>
        <cmn:StateOrRegion>NH</cmn:StateOrRegion>
        <cmn:PostalCode>03801</cmn:PostalCode>
        <cmn:Country>US</cmn:Country>
        <cmn:CorporateFax></cmn:CorporateFax>
        <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000153</cmn:AddressObjectGUID>
        <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbe</cmn:HouseGUID>
        <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
        <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:BusinessInfo>
</cmn:ToBusinessPartyInfo>
-->
<!-- EITHER ShipToLocationLookupId or ShipToLocationInfo, but not both -->
<cmn:ShipToLocationLookupId type="GLN">1223331013844</cmn:ShipToLocationLookupId>
<!--
<cmn:ShipToLocationInfo>
    <cmn:FacilityId type="COMPANYSITEID">122333</cmn:FacilityId>
    <cmn:LocationInfo>
        <cmn:BusinessName>Grondin Pharmacy</cmn:BusinessName>
        <cmn:BusinessType>Pharmacy</cmn:BusinessType>
        <cmn:Street1>100 Main Street</cmn:Street1>
        <cmn:City>Portsmouth</cmn:City>
        <cmn:Village></cmn:Village>
        <cmn:HouseNumber></cmn:HouseNumber>
        <cmn:Township></cmn:Township>
        <cmn:StateOrRegion>NH</cmn:StateOrRegion>
        <cmn:PostalCode>03801</cmn:PostalCode>
        <cmn:Country>US</cmn:Country>
        <cmn:CorporateFax></cmn:CorporateFax>
        <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000154</cmn:AddressObjectGUID>
        <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbd</cmn:HouseGUID>
        <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
        <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:LocationInfo>
    <cmn:LicenseNumber state="NH" agency="NABP">89123456</cmn:LicenseNumber>
</cmn:ShipToLocationInfo>
-->
</cmn:ReceiverInfo>
<cmn:CarrierInfo>

```



```

<!-- EITHER CarrierBusinessPartyLookupId or CarrierBusinessPartyInfo, but not both -->
<cmn:CarrierBusinessPartyLookupId type="COMPANYSITEID">122333</cmn:CarrierBusinessPartyLookupId>
<!--
<cmn:CarrierBusinessPartyInfo>
  <cmn:BusinessId type="">CarrierBusinessPartyInfo-BusinessId</cmn:BusinessId>
  <cmn:BusinessClassification>CarrierBusinessPartyInfo-
BusinessClassification</cmn:BusinessClassification>
  <cmn:BusinessTransactionRole></cmn:BusinessTransactionRole>
  <cmn:BusinessInfo>
    <cmn:BusinessName>Grondin Pharmacy</cmn:BusinessName>
    <cmn:BusinessType>Pharmacy</cmn:BusinessType>
    <cmn:Street1>100 Main Street</cmn:Street1>
    <cmn:City>Portsmouth</cmn:City>
    <cmn:Village></cmn:Village>
    <cmn:HouseNumber></cmn:HouseNumber>
    <cmn:Township></cmn:Township>
    <cmn:StateOrRegion>NH</cmn:StateOrRegion>
    <cmn:PostalCode>03801</cmn:PostalCode>
    <cmn:Country>US</cmn:Country>
    <cmn:CorporateFax></cmn:CorporateFax>
    <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>
    <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
    <cmn:TaxRegsitrationCode></cmn:TaxRegsitrationCode>
    <cmn:PremisesCode></cmn:PremisesCode>
  </cmn:BusinessInfo>
</cmn:CarrierBusinessPartyInfo>
-->
</cmn:CarrierInfo>
</som:OrderDetails>
<cmn:WarehouseOperatorName>Patrick Murphy</cmn:WarehouseOperatorName>
<som:AddPickedItems>
  <cmn:Serial format="AI(01)+AI(21)">015088202501033321100000060001</cmn:Serial>
</som:AddPickedItems>
<som:Aggregation>
  <cmn:EventDateTime>2017-05-30T06:30:32.00Z</cmn:EventDateTime>
  <cmn:EventLocation>EventLocation</cmn:EventLocation>
  <cmn:ParentSerial format="AI(01)+AI(21)">015088202501033321100000060002</cmn:ParentSerial>
  <cmn:PackagingLevel>EA</cmn:PackagingLevel>
  <cmn:NumberList>
    <cmn:Serial format="AI(01)+AI(21)" orderItemNumber

```

```

"708">015088202501033321100000060001</cmn:Serial>
      </cmn:NumberList>
    </som:Aggregation>
  </som:MessageBody>
</som:SOMSalesShipmentMessage>

```

## Errors

| Data Element           | Error Message                                                                                  | Description                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>         |                                                                                                |                                                                                                              |
| cmn:BusinessId         | CarrierBusinessPartyInfo BusinessId is required when ShipToCountry is Brazil !!!               | The error occurs if ShipToCountryCode = "BR", but CarrierBusinessPartyInfo is empty or null.                 |
| cmn:BusinessId   @type | Valid carrier party BusinessId type is required !!!                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
|                        | Party type attribute is required if receiving business party BusinessId is populated !!!       | The error occurs if BusinessId is populated, but the source is empty or null.                                |
|                        | Valid receiving business party BusinessId type is required !!!                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
|                        | Party type attribute is required if carrier party BusinessId is populated !!!                  | The error occurs if BusinessId is populated, but the source is empty or null.                                |
|                        | Party type attribute is required if source from business party cmn:BusinessId is populated !!! | The error occurs if BusinessId is populated, but the source is empty or null.                                |
|                        | Valid from business party BusinessId type is required !!!                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:BusinessName       | Receiving business party name is required !!!                                                  | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
|                        | From business party name is required !!!                                                       | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
|                        | Ship from location name is required !!!                                                        | The error occurs if ShipToCountryCode = "US" and LocationInfo is populated, but the source is empty or null. |

| Data Element                             | Error Message                                                                                                                        | Description                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
|                                          | Carrier name in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!                                              | The error occurs if BusinessInfo is populated, but the source is empty or null.                              |
| cmn:CarrierBusinessPartyLookupId   @type | Party type attribute is required if source CarrierBusinessPartyLookupId is populated !!!                                             | The error occurs if CarrierBusinessPartyLookupId is populated, but the source is empty or null.              |
|                                          | Valid CarrierBusinessPartyLookupId type is required !!!                                                                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:CarrierInfo   choice%1               | Missing mandatory choice. One of CarrierBusinessPartyLookupId OR CarrierBusinessPartyInfo is required if ShiptoCountry is Brazil !!! | The error occurs if neither CarrierBusinessPartyLookupId nor CarrierBusinessPartyInfo are present.           |
|                                          | Only one of CarrierBusinessPartyLookupId OR CarrierBusinessPartyInfo is required if ShipToCountry is Brazil!!!                       | The error occurs if both CarrierBusinessPartyLookupId and CarrierBusinessPartyInfo are present.              |
| cmn:City                                 | From business party city is required !!!                                                                                             | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
|                                          | Receiving business party city name is required !!!                                                                                   | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
|                                          | Carrier city in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!                                              | The error occurs if BusinessInfo is populated, but the source is empty or null.                              |
|                                          | Ship from city name is required !!!                                                                                                  | The error occurs if ShipToCountryCode = "US" and LocationInfo is populated, but the source is empty or null. |
| cmn:ContractType                         | Valid Contract Type is required !!!                                                                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:Country                              | From business party country code is required !!!                                                                                     | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
|                                          | Carrier country in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!!                                          | The error occurs if BusinessInfo is populated, but the source is empty or null.                              |
|                                          | Ship from country code is required !!!                                                                                               | The error occurs if ShipToCountryCode = "US" and                                                             |

| Data Element                          | Error Message                                                                                                                  | Description                                                                                                  |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
|                                       |                                                                                                                                | LocationInfo is populated, but the source is empty or null.                                                  |
|                                       | Receiving business party country code is required !!!                                                                          | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
| cmn:EventLocation                     | Event location identifier is required !!!                                                                                      | The error occurs if Aggregation is populated, but the source is empty or null.                               |
| cmn:FacilityId                        | Ship from facility location identifier is required if LocationInfo group is populated !!!                                      | The error occurs if LocationInfo is present, but ShipFromLocationLookupId is empty or null.                  |
|                                       | Receiver facility location identifier is required if LocationInfo group is populated !!!                                       | The error occurs if LocationInfo is present, but ShipToLocationId is empty or null.                          |
| cmn:FacilityId   @type                | Valid party type attribute is required when ship to FacilityId is populated !!!                                                | The error occurs if FacilityId is populated, but the source is empty or null.                                |
|                                       | Valid ship to FacilityId type is required !!!                                                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
|                                       | Valid party type attribute is required when source ship from FacilityId is populated !!!                                       | The error occurs if FacilityId is populated, but the source is empty or null.                                |
|                                       | Valid ship from FacilityId type is required !!!                                                                                | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:FromBusinessPartyLookupId   @type | Valid FromBusinessPartyLookupId type is required !!!                                                                           | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
|                                       | Party type attribute is required if source FromBusinessPartyLookupId is populated !!!                                          | The error occurs if FromBusinessPartyLookupId is populated, but the source is empty or null.                 |
| cmn:LocationId                        | Location ID is required !!!                                                                                                    | The error occurs if the source is empty or null.                                                             |
| cmn:OrderItem   choice%1              | If both are present throw error: Only one of InternalMaterialCode OR PackagingItemCode is required !!!                         | The error occurs if both InternalMaterialCode and PackagingItemCode are present.                             |
|                                       | If neither are present throw error: Missing mandatory choice. One of InternalMaterialCode OR PackagingItemCode is required !!! | The error occurs if neither InternalMaterialCode nor PackagingItemCode are present.                          |

| Data Element                  | Error Message                                                                                             | Description                                                                                                  |
|-------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| cmn:PackagingItemCode   @type | Product type attribute is required when source PackagingItemCode is populated !!!                         | The error occurs if PackagingItemCode is populated, but the source is empty or null.                         |
|                               | Valid Item Code Type is required !!!                                                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:ParentSerial              | Parent serial number is required !!!                                                                      | The error occurs if Aggregation is populated, but the source is empty or null.                               |
| cmn:PostalCode                | Carrier postal code in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!!           | The error occurs if BusinessInfo is populated, but the source is empty or null.                              |
|                               | Ship from postal code is required !!!                                                                     | The error occurs if ShipToCountryCode = "US" and LocationInfo is populated, but the source is empty or null. |
|                               | From business party postal code is required !!!                                                           | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
|                               | Receiving business party postal code is required !!!                                                      | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
| cmn:ReceiverInfo   choice%1   | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                          | The error occurs if both ToBusinessPartyLookupId and ToBusinessPartyInfo are present.                        |
|                               | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!     | The error occurs if neither ToBusinessPartyLookupId nor ToBusinessPartyInfo are present.                     |
| cmn:ReceiverInfo   choice%2   | Only one of ShipToLocationLookupId OR ShipToLocationInfo group is required !!!                            | The error occurs if both ShipToLocationLookupId and ShipToLocationInfo are present.                          |
| cmn:SenderInfo   choice%1     | Missing mandatory choice. One of FromBusinessPartyLookupId OR FromBusinessPartyInfo group is required !!! | The error occurs if neither FromBusinessPartyLookupId nor FromBusinessPartyInfo are present.                 |
|                               | Only one of FromBusinessPartyLookupId OR FromBusinessPartyInfo group is required !!!                      | The error occurs if both FromBusinessPartyLookupId and FromBusinessPartyInfo are present.                    |
| cmn:SenderInfo   choice%2     | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!                        | The error occurs if both ShipFromLocationLookupId and ShipFromLocationInfo are present.                      |

| Data Element                         | Error Message                                                                                     | Description                                                                                                  |
|--------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| cmn:ShipFromLocationLookupId   @type | Valid party type attribute is required when source ShipFromLocationLookupId is populated !!!      | The error occurs if ShipFromLocationLookupId is populated, but the source is empty or null.                  |
|                                      | Valid ShipFromLocationLookupId is required !!!                                                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:ShipToLocationLookupId   @type   | Valid party type attribute is required when source ShipToLocationLookupId is populated !!!        | The error occurs if ShipToLocationLookupId is populated, but the source is empty or null.                    |
|                                      | Valid ShipToLocationLookupId type is required !!!                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:ToBusinessPartyLookupId   @type  | Party type attribute is required if source ToBusinessPartyLookupId is populated !!!               | The error occurs if ToBusinessPartyLookupId is populated, but the source is empty or null.                   |
|                                      | Valid ToBusinessPartyLookupId type is required !!!                                                | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:TransactionIdentifier   @type    | Valid Transaction Identifier type is required !!!                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:UnitPrice   @currencyCode        | Currency Code is required if Unit Price exists !!!                                                | The error occurs if UnitPrice is populated, but the source is empty or null.                                 |
| cmn:Quantity                         | Quantity greater than 0 is required !!!                                                           | The error occurs if the source is 0 or less than 0.                                                          |
| cmn:SalesDistributionType            | Valid sales distribution type is required !!!                                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.          |
| cmn:Serial                           | Child serial number is required !!!                                                               | The error occurs if Aggregation is populated, but the source is empty or null.                               |
| cmn:ShipFromCountryCode              | Valid ShipTo Country Code is required !!!                                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:ShipToCountryCode                | Valid ShipFrom Country Code is required !!!                                                       | The error occurs if the source is present, but there is no matching entry in the lookup file.                |
| cmn:StateOrRegion                    | From business party state or region code is required !!!                                          | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null. |
|                                      | Carrier StateOrRegion in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!! | The error occurs if BusinessInfo is populated, but the source is empty or null.                              |

| Data Element                     | Error Message                                                                                                                                                                                                                                                                                                                                                                                            | Description                                                                                                                            |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
|                                  | Receiving business party state or region code is required !!!                                                                                                                                                                                                                                                                                                                                            | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null.                           |
|                                  | Ship from state or region code is required !!!                                                                                                                                                                                                                                                                                                                                                           | The error occurs if ShipToCountryCode = "US" and LocationInfo is populated, but the source is empty or null.                           |
| cmn:Street1                      | Receiving business party street address is required !!!                                                                                                                                                                                                                                                                                                                                                  | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null.                           |
|                                  | Carrier Street1 in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!                                                                                                                                                                                                                                                                                                               | The error occurs if BusinessInfo is populated, but the source is empty or null.                                                        |
|                                  | From business party street address is required !!!                                                                                                                                                                                                                                                                                                                                                       | The error occurs if ShipToCountryCode = "US" and BusinessInfo is populated, but the source is empty or null.                           |
| cmn:Street2                      | Ship from street address is required !!!                                                                                                                                                                                                                                                                                                                                                                 | The error occurs if ShipToCountryCode = "US" and LocationInfo is populated, but the source is empty or null.                           |
| cmn:SupplyType                   | Valid Supply Type is required !!!                                                                                                                                                                                                                                                                                                                                                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                                          |
| cmn:TransactionIdentifier        | Transaction identifier is required !!!                                                                                                                                                                                                                                                                                                                                                                   | The error occurs if the source is empty or null.                                                                                       |
| <b>Class 2</b>                   |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                        |
| cmn:CarrierBusinessPartyLookupId | Could not perform Master Data lookup to populate transportation carrier business address fields.<br><CarrierBusinessPartyLookupId / type><br><CarrierBusinessPartyLookupId > is not configured in your Company or Partner Company Master Data. Please configure <CarrierBusinessPartyLookupId / type> <CarrierBusinessPartyLookupId > in Company or Partner Company Master Data, and reprocess the file. | The error occurs if cmn:CarrierBusinessPartyLookupId   @type or the source is empty or null in Company or Partner Company Master Data. |
| cmn:FromBusinessPartyLookupId    | Could not perform Master Data lookup to populate sender business address fields.<br><FromBusinessPartyLookupId / type>                                                                                                                                                                                                                                                                                   | The error occurs if cmn:FromBusinessPartyLookupId   @type or the source is empty or null in Company or Partner Company Master Data.    |

| Data Element                 | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Description                                                                                                                         |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
|                              | <FromBusinessPartyLookupId> is not configured in your Company or Partner Company Master Data. Please configure <FromBusinessPartyLookupId / type> <FromBusinessPartyLookupId> in Company or Partner Company Master Data, and reprocess the file.                                                                                                                                                                                                                                    |                                                                                                                                     |
| cmn:FundingSource            | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU.                                                                                                                                                                                                                                                                                                                                                                                          | The error occurs if both cmn:ShipToCountryCode and cmn:ShipFromCountryCode = "RU", but the source is empty or null.                 |
| cmn:OrderItemList            | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, Lot <Lot Number> but <EA Level Serial Number Count> item serial numbers were found.                                                                                                                                                                                                                                                                                               | The error occurs if AllowShortVerificationCount = true, but derived quantity is greater than OrderItemQuantity.                     |
|                              | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, Lot <Lot Number> but <EA Level Serial Number Count> item serial numbers were found.                                                                                                                                                                                                                                                                                               | The error occurs if AllowShortVerificationCount = false, but derived quantity does not equal OrderItemQuantity.                     |
| cmn:Serial                   | Cannot perform operation on serial number <serial number> with serial number state <serial number state>. This operation can only be performed when the serial number is <List of serial number states separated by or's>                                                                                                                                                                                                                                                           | The error occurs if the source was not commissioned before it was shipped.                                                          |
| cmn:ShipFromLocationLookupId | Could not perform Location Master Data lookup to populate sender shipping address fields. <ShipFromLocationLookupId / type> <ShipFromLocationLookupId> is not configured in your Company Location Master Data nor in your Partner Location Master Data. Please configure <ShipFromLocationLookupId / type> <ShipFromLocationLookupId> in Company Location Master Data or in Partner Location Master Data (if the ship from location is a partner location), and reprocess the file. | The error occurs if cmn:ShipFromLocationLookupId   @type or the source is empty or null in Company or Partner Location Master Data. |
| cmn:ShipToLocationLookupId   | Could not perform Location Master Data lookup to populate receiver shipping address fields. <ShipToLocationLookupId / type> <ShipToLocationLookupId> is not configured in your                                                                                                                                                                                                                                                                                                      | The error occurs if cmn:ShipToLocationLookupId   @type or the source is empty or null in Company or Partner Location Master Data.   |



| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                                                                                                                                                                        | Description                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   | Company or Partner Location Master Data. Please configure <ShipToLocationLookupId / type> <ShipToLocationLookupId> in Company Partner Location Master Data and reprocess the file.                                                                                                                                                                                   |                                                                                                                                                               |
| cmn:ToBusinessPartyLookupId                                                                                                                                       | Could not perform Master Data lookup to populate receiver business address fields.<br><ToBusinessPartyLookupId / type><br><ToBusinessPartyLookupId> is not configured in your Company or Partner Company Master Data. Please configure <ToBusinessPartyLookupId / type> <ToBusinessPartyLookupId> in Company or Partner Company Master Data, and reprocess the file. | The error occurs if cmn:ToBusinessPartyLookupId I <b>@type</b> or the source is empty or null in Company or Partner Company Master Data.                      |
| tl:salesDistributionType                                                                                                                                          | Serial Numbers with Recalled status cannot be shipped.                                                                                                                                                                                                                                                                                                               | (missing or bad snippet) salesDistrubutionType = INCOUNTRYSALE or EXPORTSALE for sales shipments, but one or more serial numbers have a Recalled reason code. |
| cmn:TransactionIdentifier   @date                                                                                                                                 | Order Item Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                                                                                                                                                                                                     | The error occurs if cmn:ShipToCountryCode = "RU" but the source is empty or null.                                                                             |
| cmn:UnitPrice                                                                                                                                                     | Unit Price is required if Ship To Country Code is RU and Ship From Country Code is any of RU, AM, BY, KZ, KG.                                                                                                                                                                                                                                                        | The error occurs if cmn:ShipToCountryCode = "RU" and cmn:ShipFromCountryCode = "AM", "BY", "KG", "KZ", or "RU", but the source is empty or null.              |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                               |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                               |

## ESM Shipment (EPCIS v1.2)

### Guidelines

Use this message for any type of shipment (i.e. sale, transfer, or return). This message can contain optional commissioning and aggregation data, in addition to the required shipping data.



- When product changes ownership from an MAH, or a CMO or 3PL acting on behalf of an MAH, to another entity, an outbound shipment is generated and the serial numbers are put into a **shipped** state.
- When product is moving between locations (i.e. not a change of ownership) working on behalf of an MAH, an inbound shipment is generated and the serial numbers are put into a **pending receipt** state.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:**SOM\_ESM\_SHIPMENT

**Info Exchange Display Name:** ESM Shipment

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type    | Description                                                                                                                         |
|---------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -       | <b>Required.</b> EPCIS message root element.                                                                                        |
| @schemaVersion      | 1...1<br>0/*  | Decimal | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <b>1.2</b> . <sup>1</sup> |

<sup>1</sup>1.2

| Data Element                        |  |  |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------|--|--|--|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| @creationDate                       |  |  |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EPCISHeader                         |  |  |  | 0...1<br>-    | -        | <b>Required.</b> XML file control header. This message supports the following use cases: <ul style="list-style-type: none"> <li>Shipping event only: Commission and aggregation transactions have already been processed.</li> <li>Aggregation + Shipping events: Commission events have already been processed.</li> <li>Aggregation + Shipping + Decommission/Destroy events: Commission events have already been processed.</li> <li>Commission + Shipping events: Product is not aggregated.</li> <li>Commission + Aggregation + Shipping events: All events reported at same time from external system.</li> <li>Commission + Shipping + Decommission/Destroy events: Product is not aggregated.</li> <li>Commission + Aggregation + Shipping + Decommission/Destroy events: All events reported at same time from external system.</li> <li>Shipping + Decommission/Destroy events: Commission and Aggregation transactions have already been processed.</li> </ul> Shipping event is required; all other events are optional. |
| sbdh:StandardBusinessDocumentHeader |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| sbdh:HeaderVersion                  |  |  |  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <b>1.0</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| sbdh:Sender                         |  |  |  | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| sbdh:Identifier                     |  |  |  | 1...1<br>1/*  | String   | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>3</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example: <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <div> <i>i</i> GLNs do not have an urn/http prefix. </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>2016-12-18T22:08:02Z<sup>2</sup>1.0<sup>3</sup>1100001014507

| Data Element |  |  |                             |            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|-----------------------------|------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |            |               |        | See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |                             | @Authority | 1...1<br>1/*  | String | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>1</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                    |
|              |  |  | sbdh:Receiver               |            | 1...*<br>-    | -      | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | sbdh:Identifier             |            | 1...1<br>1/*  | String | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>2</sup><br>Send SGLN and all other party types with the GS1-conformant uri prefix, for example: <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <div>  GLNs do not have an urn/http prefix. </div> See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values. |
|              |  |  | @Authority                  |            | 1...1<br>1/*  | String | <b>Required.</b> The receiver identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>3</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                  |
|              |  |  | sbdh:DocumentIdentification |            | 1...1<br>-    | -      | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | sbdh:Standard               |            | 1...1<br>0/*  | String | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | sbdh:TypeVersion            |            | 1...1<br>0/*  | String | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | sbdh:InstanceIdentifier     |            | 1...1<br>1/*  | String | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>GLN<sup>2</sup>0614141123452<sup>3</sup>GLN<sup>4</sup>EPCglobal<sup>5</sup>1.0<sup>6</sup>201609201745200001

| Data Element |  |  |  |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--------------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> Identifies the document type. The <b>sbdh:Type</b> value is set to <b>Events</b> for a shipment event. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> .                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | extension                | 0...1<br>-    | -        | Header extension area with master data attributes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | EPCISMasterData          | 0...1<br>-    | -        | Master data extension header. May contain product master data attributes for Commissioning event and/or business and ship party address information.<br><br><div><b>i</b> Full GS1 conformance requires that all product and party master data be stored in the EPCIS header extension EPCISMasterData   VocabularyList   Vocabulary   VocabularyElementList   <b>VocabularyElement</b>. It is strongly urged that all product master data for Commissioning and Transformation events be sent in the <b>VocabularyElement</b> within the <b>EPCISMasterData</b> header extension.</div> |
|              |  |  |  | VocabularyList           | 1...1<br>-    | -        | <b>Required.</b> Vocabulary list group master data elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | Vocabulary(1)            | 0...*<br>-    | -        | Looping vocabulary element with discrete item master data and/or party master data element groups. Vocabulary occurs only once for all item master entries and party address info present in message, if the group is populated. Group is optional. If it does not appear in master data header extension, no error will be thrown.                                                                                                                                                                                                                                                      |
|              |  |  |  | @type                    | 1...1<br>0/*  | String   | <b>Required.</b> Vocabulary type identifying product master data elements. Product master data is defined by VocabularyElement   @id.<br>Valid value: <code>urn:epcglobal:epcis:vtype:EPCClass = product master data</code> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | VocabularyElementList    | 0...1<br>-    | -        | List of vocabulary elements containing master data attributes for each unique product code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | VocabularyElement        | 1...*<br>-    | -        | Looping vocabulary element identifying each unique SGTIN, NTIN, or China Product Code for product master data embedded in the epc serial number in the Commissioning and Transformation events. SSCC codes are not included in <b>VocabularyElement</b> product master data.                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>Events<sup>2</sup>urn:epcglobal:epcis:vtype:EPCClass

| Data Element |  |  |  |  |  |  |           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|--|--|-----------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |           |               |        | <p><b>ⓘ</b> To conform with GS1 standards, master data attributes should be sent in the <b>VocabularyElement</b>. Each unique SGTIN, NTIN, or China Product Code embedded in Commissioning event epcList   <b>epc</b> and Transformation event outputEPC   <b>epc</b> serial numbers should be sent in one instance of <b>VocabularyElement</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies the product code for which master data is being sent in the <b>VocabularyElement</b> loop. VocabularyElement   @id = SGTIN, NTIN, or China Product Code. These are the only values supported in this element. All other product identifier types will be sent as additional trade item types. SSCC codes are not identified in any part of the <b>VocabularyElement</b> group.<sup>1</sup> Must match the product code embedded within the serial number in the epc code in one or more commissioning events or the outputEPCList   <b>epc</b> in one or more transformation events.</p> <p>SGTIN</p> <ul style="list-style-type: none"> <li>Prefix: <code>urn:epc:idpat:sgtin:</code></li> <li>Example: <code>urn:epc:idpat:sgtin:0030001.0012345.*</code></li> </ul> <p><b>ⓘ</b> Legacy http prefix will continue to be supported: Legacy: <code>http://epcis.tracelink.com/obj/[ProductType]/</code></p> |
|              |  |  |  |  |  |  | attribute | 1...1<br>1/*  | String | <p><b>Conditionally required</b> if item master data attributes are sent in <b>VocabularyElement</b>. Instance 1 of attribute for packaging level value identified by attribute   @id.<sup>2</sup> See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <p><b>Required.</b> Attribute identifying packaging level.<br/>Valid value: <code>http://epcis.tracelink.com/mda/packageTypeCode</code><sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | <p>Instance 2 of attribute for internal material number in Pharmaceutical Manufacturer's internal system identified by attribute   @id. Identified by the value in attribute element (instance 3) in the current loop = <code>MANUFACTURER_PART_NUMBER</code>.<sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying internal material code.<br/>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code><sup>5</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute   @id (instance 2) is populated. Instance 3 of attribute for internal material number identifier type for the product. Id attribute identifying internal material code.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>urn:epc:idpat:sgtin:0030001.0012345.\*<sup>2</sup>UN<sup>3</sup>http://epcis.tracelink.com/mda/packageTypeCode<sup>4</sup>100335<sup>5</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification

| Data Element |  |  |  |  |  |  |  |           |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--|--|-----------|--|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  |           |  |               |        | <p>Valid value: <code>MANUFACTURER_PART_NUMBER</code><sup>1</sup></p> <p>Sequence of fields for internal material number is:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;100335&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;MANUFACTURER_PART_NUMBER&lt;/attribute&gt;</code></li> </ol> <div>  If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown. </div> |
|              |  |  |  |  |  |  |  | @id       |  | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying internal material code.</p> <p>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code><sup>2</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  |  | attribute |  | 0...1<br>0/*  | String | <p>Instance 4 of attribute for country drug code for all national drug code types, identified by the enum value in the next attribute element (instance 5) in the current loop and by the attribute <code>@id</code> value as an additional trade item.<sup>3</sup></p> <p>Country drug code type defined by value in the attribute element (instance 5) where attribute <code>@id</code> = <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code> OR <code>http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</code>.</p>                                                                                                                                                                      |
|              |  |  |  |  |  |  |  | @id       |  | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying internal material code.</p> <p>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code><sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  |  |  | attribute |  | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute <code>@id</code> (instance 4) is populated. Instance 5 of attribute for country drug code identifier type. Must follow attribute with country drug value. Id attribute identifying internal material code.<sup>5</sup></p> <p>Sequence of fields for country drug code is:</p> <p>GS1:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;FDA_NDC_</code></li> </ol>                                                                       |

<sup>1</sup>MANUFACTURER\_PART\_NUMBER<sup>2</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode<sup>3</sup>82025030221<sup>4</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification<sup>5</sup>FDA\_NDC\_11

| Data Element |  |  |  |  |               |  |     |          | Occurs Length | Type                                                                                                                                                                                                                                                                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|---------------|--|-----|----------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |               |  |     |          |               |                                                                                                                                                                                                                                                                                  | <div>11&lt;/attribute&gt;</div> <div>TraceLink:</div> <div><div>1. &lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</div><div>2. &lt;attribute id="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode"&gt;US_NDC442&lt;/attribute&gt;</div></div> <div><div><div><div></div></div><div>If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown.</div></div></div> <div>The following qualifiers have been defined by GS1 as additional trade item types:</div> <div><div><div>• MANUFACTURER_PART_NUMBER = Internal material number</div><div>• FDA_NDC_11 = US NDC542</div><div>• DIN = Canada Drug ID Number</div><div>• PHARMACODE_CH = Swiss Pharma Code</div><div>• NAN = Nordic Article Number</div></div></div> <div>To identify these material number types, use attribute   @id string:<br/>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode.</div> <div>For all other country drug code types, use attribute   @id string:<br/>http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode.</div> <div><div><div><div></div></div><div>Mandatory if the previous name/value pair attribute   @id (instance 4) is populated.</div></div></div> |
|              |  |  |  |  |               |  | @id | 1...10/* | String        | <div><b>Required.</b> Id attribute identifying internal material code. Valid value:<sup>1</sup></div> <div><div>• urn:epcglobal:cbv:mda#additionalTradeItemIdentification (GS1 enums).</div><div>• http://epcis.tracelink.com/mda/packageTypeCode (TraceLink enums).</div></div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | Vocabulary(2) |  |     | 0...*-   | -             | Looping vocabulary with discrete master data element groups. <b>Vocabulary</b> will occur once each for sold from, ship from, sold to, and ship to parties.                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification



| Data Element |  |  |  |  |  |                       |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--|--|-----------------------|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                       |  |               |        |  Group is optional. If it does not appear in master data header extension, no error will be thrown.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | @type                 |  | 1...1<br>0/*  | String | <p><b>Required.</b> Vocabulary type identifying location master data elements. Master data type defined by VocabularyElement   @id. Valid value: <code>urn:epcglobal:epcis:vtype:Location = party master data</code><sup>1</sup></p> <p> Sold from, ship from, sold to, and ship to for shipping event are all tracked in header master data. Party data in Shipping event is mapped from header master in <b>Vocabulary</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | VocabularyElementList |  | 0...1<br>-    | -      | List of vocabulary elements that includes all partner master information. Party identifiers and address info are stored in instances of the looping group <b>VocabularyElement</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | VocabularyElement     |  | 0...1<br>-    | -      | <p>Looping group header for data elements that identify all business party and location master data, including identifiers, identifier types, and address info.</p> <p>Shipping Event:</p> <ul style="list-style-type: none"> <li>• Sold/Transfer from business party (Mandatory if group populated)</li> <li>• Ship from location (Optional)</li> <li>• Sold/Transfer to business party (Mandatory if group populated)</li> <li>• Ship to location (Optional)</li> </ul> <p>Master data lookup is supported. If partner master data is available in TraceLink, indicate master data lookup by sending partner identifiers in the <b>sourceList</b> and/or <b>destinationList</b> for the shipping event and do not include address data in any <b>VocabularyElement</b> group.</p> <p>Master data lookup is supported from the readPoint   <b>id</b> for the decommissioning and destroying events if <b>VocabularyElement</b> is not populated with location address.</p> <p>If master data lookup is not intended, send complete address information for at least the sold-from and sold-to partners in the header master data extension. Ship-from and ship-to addresses can also be included.</p> |
|              |  |  |  |  |  | @id                   |  | 1...1<br>0/*  | String | <p><b>Required.</b> SGLN or other partner identifier and type for party master data in <b>VocabularyElement</b>. Must match <b>sourceList</b> or <b>destinationList</b> owning or location party in shipping event from:<sup>2</sup></p> <ul style="list-style-type: none"> <li>• ObjectEvent   extension   sourceList   <b>source</b> (transfer from, carrier) or</li> <li>• ObjectEvent   extension   destinationList   <b>destination</b> (transfer to)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>urn:epcglobal:epcis:vtype:Location<sup>2</sup>urn:epc:id:sgln:088202.867701.0

| Data Element |  |  |  |  |  |  |              |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|--|--------------|--|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |              |  |               |        | <p>The identifier value is mandatory for regulatory reporting. The identifier type must include a valid urn or http string prefix. Valid prefix formats include by namespace:</p> <ul style="list-style-type: none"> <li>GS1: <code>urn:epc:id:sgln:[CompanyPrefix].[LocationReference].[Extension]</code></li> <li>GS1 USHC: <code>http://epcis.gs1us.org/hc/[identifierType]/loc/[identificationValue]</code></li> <li>TraceLink: <code>http://epcis.tracelink.com/hc/[identifierType]/loc/[identificationValue]</code></li> </ul> <p>Only SGLN is supported.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | attribute(1) |  | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute(2)</b> is populated. Looping name/value pairs identifying partner address master data elements. This is the value element in the name/value pair attribute   <b>@id</b>. Stores master data item value defined by attribute   <b>@id</b>. Partner master data items currently supported:<sup>1</sup></p> <ul style="list-style-type: none"> <li>Business name - Mandatory if address populated in <b>VocabularyElement</b>.</li> <li>Business classification - Optional.</li> <li>Street address 1 - Mandatory if address populated.</li> <li>Street address 2 - Optional.</li> <li>City - Mandatory if address populated.</li> <li>District - Optional</li> <li>Village – Optional.</li> <li>House number – Optional.</li> <li>Township – Optional.</li> <li>Corporate Fax – Optional.</li> <li>State/Province/Region - Mandatory if address populated.</li> <li>Postal code - Optional.</li> <li>Country code - Mandatory if address populated.</li> <li>Premises code – Optional.</li> <li>Tax registration code – Optional.</li> </ul> <p>Create one instance of the name/value pair attribute and attribute   <b>@id</b> for each master data element returned.</p> |
|              |  |  |  |  |  |  | @id          |  | 1...1         | String | <b>Required.</b> Provides the name in the name/value pair attribute   <b>@id</b> . Identifies the master data value stored in the attribute value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>Kendall Pharma

| Data Element |  |  |  |  |  |  |              |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--|--|--------------|--------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |              |              |               |        | <p>1</p> <ul style="list-style-type: none"> <li>urn:epcglobal:cbv:mda#name</li> <li>urn:epcglobal:cbv:mda#streetAddressOne</li> <li>urn:epcglobal:cbv:mda#streetAddressTwo</li> <li>urn:epcglobal:cbv:mda#streetAddressThree</li> <li>urn:epcglobal:cbv:mda#city</li> <li>http://epcis.tracelink.com/mda/district</li> <li>http://epcis.tracelink.com/mda/village</li> <li>http://epcis.tracelink.com/mda/houseNumber</li> <li>http://epcis.tracelink.com/mda/township</li> <li>http://epcis.tracelink.com/mda/corporateFax</li> <li>urn:epcglobal:cbv:mda#state</li> <li>urn:epcglobal:cbv:mda#postalCode</li> <li>urn:epcglobal:cbv:mda#countryCode</li> <li>http://epcis.tracelink.com/mda/AddressObjectGUID</li> <li>http://epcis.tracelink.com/mda/HouseGUID</li> <li>http://epcis.tracelink.com/mda/partyRoleCode</li> <li>http://epcis.tracelink.com/mda/premisesCode</li> <li>http://epcis.tracelink.com/mda/taxRegistrationCode</li> </ul> |
|              |  |  |  |  |  |  | attribute(2) | 0...*<br>0/* |               | String | <p><b>Conditionally required</b> if <b>attribute(1)</b> is present. Looping name/value pairs identifying additional party identifier elements. This is the value element in the name/value pair attribute   <b>@id</b>. Stores additional party identifiers and identifier types defined by <b>@id</b>.<sup>2</sup></p> <p>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>Additional party identifier - Optional (one or more supported).</li> <li>Additional party identifier type - Optional (one or more supported).</li> </ul> <p>Create one instance of the name/value pair attribute and attribute   <b>@id</b> for each master data element returned.</p>                                                                                                                                                                                                                                         |

<sup>1</sup>urn:epcglobal:cbv:mda#name<sup>2</sup>10023141

| Data Element |  |  |  |  |  |  |  |     |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--|--|--|--|-----|--|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  |     |  |               |        | <p>Additional party identifiers must be sent in a double attribute combination. The sequence must be:</p> <ul style="list-style-type: none"> <li>Attribute 1 identifies and provides the party identifier value.</li> <li>Attribute 2 identifies the party identifier type.</li> </ul> <p>For example:</p> <ul style="list-style-type: none"> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue"&gt;10023141&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode"&gt;DUNS_PLUS_FOUR&lt;/attribute&gt;</code> or</li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifier"&gt;10023141&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifierType"&gt;DUNS4&lt;/attribute&gt;</code></li> </ul> <div> <p>❗ If this sequence of double attributes is not followed for additional party identifiers, the additional party identifier will not be mapped to the TraceLink system and no error will be thrown.</p> </div> <div> <p>❗ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  |  |  | @id |  | 1...1<br>0/*  | String | <p><b>Required.</b> Provides the name in the name/value pair attribute   @id. Identifies the master data value stored in the attribute value element, using urn or http prefix. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li><code>http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</code></li> <li><code>http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| EPCISBody    |  |  |  |  |  |  |  |     |  | 1...1<br>-    | -      | <p><b>Required.</b> Contains all of the EPCIS events for this message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup><http://epcis.tracelink.com/mda/additionalPartyIdentificationValue>

| Data Element |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|---------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | EventList           | 1...1<br>-    | -        | <p><b>Required.</b> The <b>EventList</b> has the following structure:</p> <ul style="list-style-type: none"> <li>ObjectEvent Commissioning (Optional - 0 or more for commissioning events).</li> <li>AggregationEvent (Optional - 0 or more for aggregation events).</li> <li>ObjectEvent Shipping (Mandatory - one for shipping event).</li> </ul> <p> Order of events is not enforced by the schema.</p> |
|              |  | choice              | 1...1<br>-    | -        | <b>Required.</b> Only one of the following choice options may be selected in any one loop on EPCISBody   EventList   <b>ObjectEvent</b> OR EPCISBody   EventList   <b>AggregationEvent</b> .                                                                                                                                                                                                                                                                                                |
|              |  | ObjectEvent         | 0...*<br>-    | -        | <p>Choice 1 for <b>EventList</b>. Data = <b>ObjectEvent</b> for the Commissioning Events.<br/> <b>EventList</b> = <b>ObjectEvent</b> Commissioning when all of the following are true:</p> <ul style="list-style-type: none"> <li><b>action</b> = <b>ADD</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:commissioning</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:active</b></li> </ul>                                                                         |
|              |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Includes a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                   |
|              |  | recordTime          | 0...1<br>0/*  | DateTime | This field is not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with the choice made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                                                          |
|              |  | epcList             | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                 |
|              |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The <b>action</b> value must equal <b>ADD</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>2016-10-01T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:088202.5503022.100000000670, urn:epc:id:sscc:088202.002000000034, http://epcis.tracelink.com/hc/cn-edmc/obj/88102321100002005943, urn:epc:id:sgtin:4150.001647778.100000000002<sup>4</sup>ADD

| Data Element |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                    |
|--------------|--|--|---------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | bizStep                   | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must equal <code>urn:epcglobal:cbv:bizstep:commissioning</code> . <sup>1</sup>                                       |
|              |  |  | disposition               | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <code>urn:epcglobal:cbv:disp:active</code> . <sup>2</sup>                                             |
|              |  |  | readPoint                 | 0...1<br>-    | -      | Read point is optional in commissioning event.                                                                                                                 |
|              |  |  | id                        | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>3</sup> |
|              |  |  | extension                 | 0...1<br>-    | -      | This field is not used - GS1 Reserved.                                                                                                                         |
|              |  |  | bizLocation               | 1...1<br>-    | -      | <b>Required.</b> Business location is required in commissioning event.                                                                                         |
|              |  |  | id                        | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>4</sup> |
|              |  |  | bizTransactionList        | 0...1<br>-    | -      | This field is not used.                                                                                                                                        |
|              |  |  | extension                 | 0...1<br>-    | -      | Main extension body for commission event.                                                                                                                      |
|              |  |  | ilmd                      | 0...1<br>-    | -      | Instance lot master data specific to product being commissioned.                                                                                               |
|              |  |  | cbvmda:lotNumber          | 0...1<br>0/*  | String | The lot or batch code for the serialized item in an alphanumeric string of up to 20 characters. <sup>5</sup>                                                   |
|              |  |  | cbvmda:itemExpirationDate | 0...1<br>0/*  | Date   | The expiration date for the serialized item in YYYY-MM-DD format. <sup>6</sup>                                                                                 |

<sup>1</sup>urn:epcglobal:cbv:bizstep:commissioning<sup>2</sup>urn:epcglobal:cbv:disp:active<sup>3</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>4</sup>urn:epc:id:sgln:0614141.12345.1400<sup>5</sup>ABC123<sup>6</sup>2017-12-31

| Data Element |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|------------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:commissionEventExtensions | 0...1<br>-    | -       | <p>Extensions used for Commission ObjectEvent.<br/>The following items can be sent in the master data header extensions:</p> <ul style="list-style-type: none"> <li>• <b>tl:packagingLevel</b></li> <li>• <b>tl:internalMaterialCode</b></li> <li>• <b>tl:packagingItemCode</b></li> <li>• tl:packagingItemCode   <b>@type</b></li> <li>• <b>tl:countryDrugCode</b></li> <li>• tl:countryDrugCode   <b>@type</b></li> </ul> <p><b>Note:</b> Full GS1 conformance requires all master data be stored in the header extension EPCISMasterData   <b>VocabularyList</b>. While master data can be sent from the commissioning event extensions, it is strongly urged that all product master data items for the commissioning event be sent in the header extensions elements.</p> |
|              |  |  |  |  | tl:filterValue               | 0...1<br>-    | Integer | <p><b>tl:filterValue</b> is used only if it is mandatory by a trade partner to convert SSCC to GS1 HEX or Tag URI format.<br/>See the <a href="#">FilterValue</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | tl:packagingLevel            | 0...1<br>0/*  | String  | <p>The packaging level of the commissioned item using the supported enumeration values.<sup>1</sup></p> <p><b>Note:</b> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. a homogenous pallet).</p> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | tl:epcAttributes             | 0...*<br>-    | -       | <p>Supports optional inclusion of human readable barcode content associated with each epc number in a commission event.<br/>Included only if provided in original commission event.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | @epc                         | 1...1<br>1/*  | String  | <p><b>Conditionally required.</b> The EPC serial number to which the barcodeContent is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5].<sup>2</sup></p> <ul style="list-style-type: none"> <li>• Case: SGTIN or SSCC</li> <li>• Item: SGTIN</li> <li>• Pallet: SSCC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup>EA<sup>2</sup>urn:epc:id:sgtin:068202.0401034.11220207026272

| Data Element |  |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|--|--|-------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:barcodeContent       | 1...1<br>1/*  | String | <b>Required.</b> The human readable barcode contents encoded in the 2D barcode with parentheses for the AI keys. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  | tl:plantLocationId      | 0...1<br>0/*  | String | Identifier of plant where products were commissioned. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | tl:productionLineId     | 0...1<br>1/*  | String | Identifier of production line where products were commissioned. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:lineManagerName      | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:companyPrefix        | 0...1<br>0/*  | String | This field not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:internalMaterialCode | 0...1<br>0/*  | String | Internal material number for the product in the Pharmaceutical Manufacturer's internal systems (e.g. ERP). <sup>5</sup><br><br><div> <i>i</i> See the following additional information: <ul style="list-style-type: none"> <li>To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</li> <li>The message may include either <b>tl:internalMaterialCode</b> or <b>tl:countryDrugCode</b>, but all packaging levels must be consistent.</li> </ul> </div> |
|              |  |  |  |  |  | tl:packagingItemCode    | 0...1<br>0/*  | String | The product code for the commissioned item (e.g. GTIN-14). <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | @type                   | 1...1<br>1/*  | String | <b>Required.</b> The product code type using the supported enumeration values. <sup>7</sup><br>See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  | tl:countryDrugCode      | 0...1         | String | The national drug code for the commissioned item (e.g. NDC number for US products). <sup>8</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup>(01)50682020401034(21)11220207026272(17)170731(10)A312101(7004)0120<sup>2</sup>0614141.12345.1400<sup>3</sup>PW003<sup>4</sup>John Smith<sup>5</sup>100234<sup>6</sup>50300694220667<sup>7</sup>GTIN-14<sup>8</sup>0069-4220-66



| Data Element |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|-----------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                       |               |        | <p> See the following additional information:</p> <ul style="list-style-type: none"> <li>To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</li> <li>The message may include either <b>tl:internalMaterialCode</b> or <b>tl:countryDrugCode</b>, but all packaging levels must be consistent.</li> </ul> |
|              |  |  |  |  |  | @type                 | 0...1<br>0/*  | String | <p>The national drug code type using the supported enumeration values and any formatting instructions provided.<sup>1</sup></p> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p>                             |
|              |  |  |  |  |  | tl:manufacturingDate  | 0...1<br>0/10 | Date   | The date of manufacture for the serialized item, in YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:countryMarket      | 0...1<br>0/3  | Date   | <p>ISO country code for target country market for which the product was manufactured. Used for triggering production notifications associated with a produced batch. If batch is multi-market, then production notification will be triggered at time of shipment and this field would not be populated.<sup>3</sup></p> <p>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.</p>                                                                                                 |
|              |  |  |  |  |  | tl:referenceDocuments | 0...1<br>-    | -      | Reference document identifier associated with the commissioning activity.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | tl:poNumber           | 0...1<br>0/*  | String | PO Number associated with serial number use. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | tl:poLine             | 0...1<br>0/*  | String | PO Line number. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:workOrderNumber    | 0...1         | String | Work Order number associated with serial number use. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>FDA\_NDC\_11<sup>2</sup>2016-12-18<sup>3</sup>IN<sup>4</sup>1001764<sup>5</sup>001<sup>6</sup>1001764-00

| Data Element |  |  |  |  |  |  |  |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|--|--|------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  | tl:referenceIdentifier | 0...1<br>0/*  | String | Reference identifier (e.g. any type of identifier) associated with serial number use. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  |  |  | tl:extensionField      | 0...*<br>-    | -      | <p>One or more name/value pairs that contain additional data attributes not already supported in this message. When this attribute is populated, both the <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated.</p> <p> These extensions are not stored by TraceLink and are only used for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this transaction (e.g. when a CMO is required to provide additional data fields to the brand owner). Different trade partners may have different field requirements and may require that the <b>ExtensionField</b> be populated differently per trade partner.</p> |
|              |  |  |  |  |  |  |  | tl:fieldName           | 1...1<br>1/*  | String | <p>Field name provided by the trade partner that will receive the outbound message.<sup>2</sup></p> <p> The field name must match the field name provided by the trade partner exactly, including case, so that it can be properly detected in the outbound mapping.</p>                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  |  | tl:fieldValue          | 1...1<br>1/*  | String | Field value that corresponds to the <b>tl:fieldName</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  |  |  | tl:locationId          | 0...1<br>0/*  | String | Location to associate the Transaction Histories when they are created.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  |  |  | @type                  | 0...1<br>0/*  | String | <p>Attribute that identifies the location types.</p> <p>See the <a href="#">LocationIdType</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  |  | AggregationEvent       | 0...*<br>-    | -      | <p><b>AggregationEvent</b> is option 2 for the <b>EventList</b> choice for the Aggregation events. <b>EventList = AggregationEvent</b> when all of the following are true:</p> <ul style="list-style-type: none"> <li><b>action</b> = <b>ADD</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:packing</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>A100352<sup>2</sup>NDC\_CODE<sup>3</sup>12345678901

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                               |
|--------------|--|--|---------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>1</sup>                                                                                                                             |
|              |  |  | recordTime          | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                 |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                   |
|              |  |  | parentID            | 1...1<br>1/*  | AnyURI   | <b>Required.</b> An Identifier of the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPC is of the case; for a case-to-pallet aggregation, the EPC is of the pallet). See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>3</sup> |
|              |  |  | childEPCs           | 1...1<br>-    | -        | <b>Required.</b> A list of identifiers of the child items in the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPCs are of the items; for a case-to-pallet aggregation, the EPCs is of the cases).                                          |
|              |  |  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> The identifier of the child items in the parent container in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>4</sup>                                                                                                        |
|              |  |  | action              | 1...1<br>1/*  | String   | <b>Required.</b> The <b>action</b> value must equal <b>ADD</b> for the aggregation event. <sup>5</sup>                                                                                                                                                                                    |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:packing</b> . <sup>6</sup>                                                                                                                                                                                               |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI   | The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>7</sup>                                                                                                                                                                                          |
|              |  |  | readPoint           | 0...1<br>-    | -        | Optional for Aggregation Event.                                                                                                                                                                                                                                                           |
|              |  |  | id                  | 1...1<br>0/*  | AnyURI   | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>8</sup>                                                                                                                            |

<sup>1</sup>2016-10-01T22:10:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:088202.5503022.100000000670, urn:epc:id:sscc:088202.002000000034, http://epcis.tracelink.com/hc/cn-edmc/obj/88102321100002005943, urn:epc:id:sgtin:4150.001647778.100000000002<sup>4</sup>urn:epc:id:sgtin:088202.5503022.100000000670, urn:epc:id:sscc:088202.002000000034, http://epcis.tracelink.com/hc/cn-edmc/obj/88102321100002005943, urn:epc:id:sgtin:415001647778.0.100000000002<sup>5</sup>ADD<sup>6</sup>urn:epcglobal:cbv:bizstep:packing<sup>7</sup>urn:epcglobal:cbv:disp:in\_progress<sup>8</sup>urn:epc:id:sgln:1100001.12345.0

| Data Element |  |  |  |                               | Occurs Length | Type    | Description                                                                                                                                                                                   |
|--------------|--|--|--|-------------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | extension                     | 0...1<br>-    | -       | Not used - GS1 Reserved.                                                                                                                                                                      |
|              |  |  |  | bizLocation                   | 1...1<br>-    | -       | <b>Required.</b> Mandatory for aggregation event.                                                                                                                                             |
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                |
|              |  |  |  | bizTransactionList            | 0...1<br>-    | -       | Not used.                                                                                                                                                                                     |
|              |  |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -       | Extensions used for Aggregation Event                                                                                                                                                         |
|              |  |  |  | tl:packedStatus               | 0...1<br>0/*  | String  | The packout of the item or container using the supported enumeration values. <sup>2</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                          |
|              |  |  |  | tl:quantity                   | 0...1<br>-    | Integer | The quantity of child serial numbers aggregated to the parent container in this aggregation. <sup>3</sup>                                                                                     |
|              |  |  |  | tl:resetContainerAggregation  | 0...1<br>-    | Boolean | Reset container aggregation flag. <sup>4</sup>                                                                                                                                                |
|              |  |  |  | tl:epcOrderItemDetails        | 0...1<br>-    | -       | Group header for <b>epcOrderItemDetails</b> with a specific link between tl:orderItem   <b>tl:orderItemNumber</b> in the receiving event and the epc serial number.                           |
|              |  |  |  | tl:epcOrderItemList           | 1...*<br>-    | -       | Subgroup header.                                                                                                                                                                              |
|              |  |  |  | @orderItemNumber              | 0...1<br>-    | String  | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> , in EPC Pure Identity URI format. |
|              |  |  |  | tl:epcOrderItem               | 1...*<br>-    | String  | Serial numbers associated with the pricing and tax information in the current instance of the <b>ItemOrder</b> .                                                                              |
|              |  |  |  | tl:extensionField             | 0...*         | -       | One or more name/value pairs that contain additional data attributes not already supported in this transaction.                                                                               |

<sup>1</sup>urn:epc:id:sgln:1100001.12345.0<sup>2</sup>FULL<sup>3</sup>48<sup>4</sup>false

| Data Element |  |  |                     |               | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|---------------------|---------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |               |          | <p>When populating this element, both the <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated.</p> <p><i>i</i> These extensions are not stored by TraceLink and are only used for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this transaction (e.g. when a CMO is required to provide additional data fields to the brand owner). Different trade partners may have different field requirements and may require that the <b>ExtensionField</b> be populated differently per trade partner.</p> |
|              |  |  |                     | tl:fieldName  | 1...1<br>1/*  | String   | <p>Field name provided by the trade partner that will receive the outbound message.<sup>1</sup></p> <p><i>i</i> The field name must match the field name provided by the trade partner exactly, including case so that it can be properly detected in the outbound mapping.</p>                                                                                                                                                                                                                                                                                                  |
|              |  |  |                     | tl:fieldValue | 1...1<br>1/*  | String   | Field value that corresponds to the <b>tl:fieldName</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | ObjectEvent         |               | 1...1<br>-    | -        | <p><b>Required. EventList.</b> Data = <b>ObjectEvent</b> for Shipping events.<br/> <b>EventList = ObjectEvent</b> Shipping when all of the following are true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = <b>OBSERVE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:shipping</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_transit</b></li> </ul>                                                                                                                                                                             |
|              |  |  | eventTime           |               | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | eventTimeZoneOffset |               | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | epcList             |               | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of top most containers (e.g. pallets, cases) in the shipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |                     | epc           | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>NDC\_CODE<sup>2</sup>12345678901<sup>3</sup>2016-10-01T22:08:02Z<sup>4</sup>-04:00

| Data Element |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | action             | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must equal <b>OBSERVE</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | bizStep            | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:shipping</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | disposition        | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_transit</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | readPoint          | 0...1<br>-    | -      | <b>Required.</b> The location where the event occurred, i.e. the warehouse GLN location ID and storage location (e.g. shelf, bin) in URN format, that recorded the <b>ObjectEvent</b> .                                                                                                                                                                                                                                                                            |
|              |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>4</sup>                                                                                                                                                                                                                                                                                                     |
|              |  |  | extension          | 0...1<br>-    | -      | Not used - GS1 Reserved                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | bizLocation        | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | id                 | 1...1<br>1/*  | AnyURI | <b>Required.</b> Not used. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | extension          | 0...1<br>-    | -      | Not used - GS1 Reserved.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | bizTransactionList | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:shipping</b> . A list of the business transaction identifiers.                                                                                                                                                                                                                                                                                                                      |
|              |  |  | bizTransaction     | 1...*<br>-    | AnyURI | <b>Required.</b> The business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or invoice and/or purchase order governing this shipment, which are subject to Section 8.4.2 of (CBV1.0). The GLN that occurs after <b>urn:epcglobal:cbv:bt:</b> is the GLN of the party that issued the number (e.g. if customer issues PO Number, customer GLN is entered. If supplier issues ASN/delivery number supplier GLN is entered). <sup>6</sup> |

<sup>1</sup>OBSERVE<sup>2</sup>urn:epcglobal:cbv:bizstep:shipping<sup>3</sup>urn:epcglobal:cbv:disp:in\_transit<sup>4</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>5</sup>urn:epc:id:sgln:0614141.12345.1400<sup>6</sup>urn:epcglobal:cbv:bt:0614141000029:9847856

| Data Element |  |  |            |       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|------------|-------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |            |       |               |        |  A delivery number or ASN is mandatory, all other transaction types are optional.<br><br>The transaction number requirements vary by region. It is recommended that the following are always provided, when available, to fulfill compliance needs: <ul style="list-style-type: none"> <li>• Purchase Order Number</li> <li>• Invoice Number</li> <li>• ASN</li> </ul>                                                                                      |
|              |  |  |            | @type | 1...1<br>1/*  | String | <b>Required.</b> The transaction identifier type using the supported enumeration values (e.g. PO, ASN, RETURN). <sup>1</sup><br>A delivery number or ASN is mandatory, all other transaction types are optional.<br>See the <a href="#">TransactionId</a> enumeration list for valid values.                                                                                                                                                                                                                                                 |
|              |  |  |            | @date | 0...1<br>0/*  | Date   | <b>Required.</b> The transaction identifier date. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | extension  |       | 0...1<br>-    | -      | Main extension body for shipping event.<br><br> Source and Destination lists are optional even if party address master data is not stored in the <b>VocabularyElement</b> in the <b>EPCISMasterData</b> extension in the message header.                                                                                                                                                                                                                    |
|              |  |  | sourceList |       | 0...1<br>-    | -      | <b>Required.</b><br>Sending business, location, and carrier parties.<br><b>sourceList</b> supports one of two functions: <ol style="list-style-type: none"> <li>1. <b>VocabularyElement</b> populated with party address master data; <b>sourceList</b> identifies sold-from, ship-from, or carrier party. Party master data mapped from <b>VocabularyElement</b>.</li> <li>2. <b>VocabularyElement</b> NOT populated with party address master data; <b>sourceList</b> party identifiers used for master data lookup in backend.</li> </ol> |
|              |  |  | source     |       | 1...*<br>0/*  | String | <b>Required.</b> Source party identifier for sold-from, ship-from, or carrier parties. Party identifier in source either: <sup>3</sup> <ol style="list-style-type: none"> <li>1. Identifies sold-from, ship-from, or carrier party in populated <b>VocabularyElement</b>. Party address info mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party</li> </ol>                                                                                                             |

<sup>1</sup>urn:epcglobal:cbv:btt:desadv<sup>2</sup>2019-03-30<sup>3</sup>urn:epc:id:sgln:088202.867701.0

| Data Element |  |  |  |                 |             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|-----------------|-------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                 |             |               |        | <p>identifier in sourceList   <b>source</b> and VocabularyElement   @id.</p> <p>2. sourceList   <b>source</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is NOT populated or there is NO match between party identifiers in source and VocabularyElement   @id.</p> <p> If ship-from party the same as sold-from party, ship-from identifier does not need to be included.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |                 | @type       | 1...1<br>0/*  | String | <p><b>Required.</b> Type of source party identifier [i.e. owning (sold-from), location (ship-from), or carrier party.] Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li>Sold-from party = <code>urn:epcglobal:cbv:sdt:owning_party</code> (mandatory).</li> <li>Ship-from party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | destinationList |             | 0...1<br>-    | -      | <p><b>Required.</b></p> <p>Identifies receiving business or location parties identified in header extensions level.</p> <p><b>destinationList</b> supports one of two functions:</p> <ol style="list-style-type: none"> <li><b>VocabularyElement</b> populated with party address master data; <b>destinationList</b> identifies sold-to, ship-to parties. Party master data mapped from <b>VocabularyElement</b>.</li> <li><b>VocabularyElement</b> NOT populated with party address master data: <b>destinationList</b> party identifiers used for master data lookup in backend.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |                 | destination | 1...*<br>0/*  | String | <p><b>Required.</b> Destination party identifier for sold-to and ship-to parties. Party identifier in destination either:<sup>2</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-to or ship-to parties in populated <b>VocabularyElement</b>. Party address info mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in destinationList   <b>destination</b> and VocabularyElement   @id.</li> <li>destinationList   <b>destination</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is NOT populated or there is NO match between party identifiers in destination and VocabularyElement   @id.</li> </ol> <p> If ship-to party the same as sold-to party, ship-to identifier does not need to be included.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |

<sup>1</sup>urn:epcglobal:cbv:sdt:owning\_party<sup>2</sup>urn:epc:id:sgln:033333.101365.0



| Data Element |  |  |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|--|----------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | @type                      | 1...1<br>0/*  | String | <b>Required.</b> Identifies type of destination party identifier, i.e. owning (sold-to) or location (ship-to) party. Valid values: <sup>1</sup> <ul style="list-style-type: none"> <li>Sold-to party = <code>urn:epcglobal:cbv:sdt:owning_party</code> (mandatory).</li> <li>Ship-to party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from <b>owning_party</b>).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:shippingEventExtensions | 0...1<br>-    | -      | <b>Conditionally required</b> if Shipping Event is populated. Extensions used for Shipping Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:transactionDate         | 1...1<br>-    | Date   | <b>Required.</b> Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | tl:shipToCountryCode       | 1...1<br>2/2  | String | <b>Required.</b> 2 or 3 letter ISO country code for ship to country. This value is referenced to advise regulatory reporting if it is required for the specified country market. <sup>3</sup><br>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:shipFromCountryCode     | 0...1<br>2/2  | String | <b>Conditionally required</b> if <b>tl:salesDistributionType</b> = <b>EXPORTSALE</b> , <b>EXPORTTRANSFER</b> , or <b>EXPORTRETURN</b> . 2 or 3 letter ISO country code for ship from country. This value will be referenced to advise regulatory reporting if it is required for the specified country market. <sup>4</sup><br>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | tl:salesDistributionType   | 1...1<br>1/*  | String | <b>Required.</b> To set this value, compare the ship from country with the ship to country. <sup>5</sup> <ul style="list-style-type: none"> <li><b>INCOUNTRYSALE</b>: If ship from country = ship to country (indicates a sale within the same country).</li> <li><b>EXPORTSALE</b>: If ship from country &lt;&gt; ship to country (indicates a sale that is an export to another country).</li> <li><b>INCOUNTRYTRANSFER</b>: A transfer within a company or with a partner such as 3PL or contract manufacturer/packager, occurring within the same country.</li> <li><b>EXPORTTRANSFER</b>: A transfer within a company or with a partner such as 3PL or contract manufacturer/packager, made from one country to another.</li> <li><b>INCOUNTRYRETURN</b>: A shipment for a return of goods to the supplier, shipped within the same country.</li> <li><b>EXPORTRETURN</b>: A shipment for a return of goods to the supplier, shipped from one country to another.</li> </ul> The <b>EXPORT</b> value is not used. This value will be referenced to advise regulatory reporting of exportation, if it is mandatory for |

<sup>1</sup>urn:epcglobal:cbv:sdt:owning\_party<sup>2</sup>2016-09-30<sup>3</sup>US<sup>4</sup>US<sup>5</sup>INCOUNTRYSALE

| Data Element |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|---------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                           |               |         | the specified country market. Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.<br>See the <a href="#">SalesDistType</a> enumeration list for valid values. |
|              |  |  |  | tl:supplyType             | 0...1<br>0/*  | String  | The type of supply that is being performed using a valid value from the enumerations list.<br>See the <a href="#">SupplyType</a> enumeration list for valid values.                                                                                                                                    |
|              |  |  |  | tl:contractType           | 0...1<br>0/*  | String  | Identifies the type of contract for the sale of goods using a valid value from the enumerations list.<br>See the <a href="#">ContractType</a> enumeration list for valid values.                                                                                                                       |
|              |  |  |  | tl:dropShipmentIndicator  | 0...10/*      | Boolean | Indicates if shipment is a drop shipment. <sup>1</sup>                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:comments               | 0...1<br>0/*  | String  | Optional remarks or comments associated with delivery.                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:warehouseOperatorName  | 0...1<br>0/*  | String  | Name of the person responsible for warehouse operations. <sup>2</sup>                                                                                                                                                                                                                                  |
|              |  |  |  | tl:correctiveShipment     | 0...1<br>0/*  | Boolean | Corrective shipment flag is set when shipment is used to replace a previously voided shipment. <sup>3</sup>                                                                                                                                                                                            |
|              |  |  |  | tl:originalDeliveryNumber | 0...1<br>0/*  | String  | Used to identify previous delivery that was voided and is being replaced by current delivery. <sup>4</sup><br> Populated only if <b>tl:correctiveShipment = true</b> .                                                |
|              |  |  |  | tl:contractNumber         | 0...1<br>0/*  | String  | Identification number of the contract. <sup>5</sup>                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:fundingSource          | 0...1<br>0/*  | String  | <b>Required.</b> Source of the funding. <sup>6</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                                       |
|              |  |  |  | tl:entryPort              | 0...1<br>0/*  | String  | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                               |

<sup>1</sup>false<sup>2</sup>John Smith<sup>3</sup>true<sup>4</sup>H9022413<sup>5</sup>1234567<sup>6</sup>FederalBudgetFunds

| Data Element |  |  |  |                           | Occurs Length  | Type   | Description                                                                                                                                                                                                  |
|--------------|--|--|--|---------------------------|----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:exitPort               | 0...1<br>0/*   | String | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                      |
|              |  |  |  | tl:deliveryInspection     | 0...1<br>0/*   | String | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                          |
|              |  |  |  | tl:deliveryInspectionDate | 0...1<br>10/10 | Date   | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>1</sup>                                                                                           |
|              |  |  |  | tl:deliveryInspectionNote | 0...1<br>0/*   | String | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                          |
|              |  |  |  | tl:removalFromCirculation | 0...1<br>0/*   | String | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                    |
|              |  |  |  | tl:aggregationInspection  | 0...1<br>0/*   | String | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                     |
|              |  |  |  | tl:epcOrderItemDetails    | 0...1<br>-     | -      | Group header with specific link between the aggregation event epc and <b>@orderItemNumber</b> .                                                                                                              |
|              |  |  |  | tl:epcOrderItemList       | 1...<br>*      | -      | <b>Required.</b> Subgroup header.                                                                                                                                                                            |
|              |  |  |  | @orderItemNumber          | 0...1<br>0/*   | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                 |
|              |  |  |  | tl:epcOrderItem           | 1...<br>1/*    | String | <b>Required.</b> Serial numbers associated with the pricing and tax information in the current instance of <b>tl:orderItem</b> .                                                                             |
|              |  |  |  | tl:orderItemList          | 0...1<br>-     | -      | Order item list group is populated to communicate the pick quantities for each item code at the EACH (unit) level.                                                                                           |
|              |  |  |  | tl:orderItem              | 1...<br>*      | -      | <b>Required.</b> A repeating element that captures the item code, lot number, and quantity for each item in the order. Each unique item code and lot number are communicated in a separate order item group. |
|              |  |  |  | tl:orderItemNumber        | 0...1<br>0/*   | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                 |
|              |  |  |  | choice%1                  | -              | -      | Populate only one of <b>tl:InternalMaterialCode</b> or <b>tl:PackagingItemCode</b> .                                                                                                                         |

<sup>1</sup>2021-12-21

| Data Element |  |  |  |  |  |  |                             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--|--|-----------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:internalMaterialCode     | 0...1<br>1/*  | String  | <b>Conditionally required</b> if <b>tl:packagingItemCode</b> is not populated. Option 1 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the internal material number configured in Product Master Data. <sup>1</sup>                    |
|              |  |  |  |  |  |  | tl:packagingItemCode        | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>tl:internalMaterialCode</b> is not populated. Option 2 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>2</sup> |
|              |  |  |  |  |  |  | @type                       | 0...1<br>0/*  | String  | <b>Required.</b> The product code type for the packaging item code using the supported enumeration values (e.g. GTIN-14). See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                       |
|              |  |  |  |  |  |  | cbvmdata:lotNumber          | 0...1<br>0/*  | String  | The lot or batch code for the items to be picked (if available) in an alphanumeric string. <sup>3</sup>                                                                                                                                                             |
|              |  |  |  |  |  |  | cbvmdata:itemExpirationDate | 0...1<br>1/*  | Date    | The expiration date for the serialized item, in YYYY-MM-DD format.                                                                                                                                                                                                  |
|              |  |  |  |  |  |  | tl:quantity                 | 1...1<br>0/*  | Integer | The quantity of items at the EACH (unit) level of the item code and lot if specified to be picked. <sup>4</sup>                                                                                                                                                     |
|              |  |  |  |  |  |  | tl:unitPrice                | 0...1<br>0/*  | Decimal | Unit price of item. <sup>5</sup>                                                                                                                                                                                                                                    |
|              |  |  |  |  |  |  | @currencyCode               | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>6</sup>                                                                                                                                                                                         |
|              |  |  |  |  |  |  | tl:vat                      | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>7</sup>                                                                                                                                                                                                                              |
|              |  |  |  |  |  |  | @currencyCode               | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>8</sup> See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                  |
|              |  |  |  |  |  |  | tl:grossPrice               | 0...1<br>-    | Decimal | Gross price including unit price and all taxes and fees.                                                                                                                                                                                                            |

<sup>1</sup>100234<sup>2</sup>00882025030223<sup>3</sup>A12345<sup>4</sup>50<sup>5</sup>35.67<sup>6</sup>USD<sup>7</sup>152.22<sup>8</sup>USD

| Data Element |  |  |  |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|--|--|--------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>1</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                                                      |
|              |  |  |  |  |  |  | tl:isSerialized          | 0...1<br>0/*  | Boolean | Indicates if item is not serialized. If omitted, defaults value to <code>true</code> . <sup>2</sup>                                                                                                                                                                                                        |
|              |  |  |  |  |  |  | tl:transactionIdentifier | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>3</sup>                                                                                                                                                                               |
|              |  |  |  |  |  |  | @type                    | 1...1<br>1/*  | String  | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li>• <code>DESTRUCTION</code></li> <li>• <code>INVOICE</code></li> <li>• <code>NOTAFISCAL</code></li> <li>• <code>OTHER</code></li> <li>• <code>PO</code></li> <li>• <code>RETURN</code></li> </ul> |
|              |  |  |  |  |  |  | @date                    | 0...1<br>0/*  | Date    | The transaction identifier date. <sup>4</sup>                                                                                                                                                                                                                                                              |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:gslushc="http://epcis.gslus.org/hc/ns" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2017-08-31T17:45:20.0Z">
```

<sup>1</sup>USD<sup>2</sup>true<sup>3</sup>PO303005<sup>4</sup>2019-03-30

```

<EPCISHeader>
  <sbdh:StandardBusinessDocumentHeader>
    <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
    <sbdh:Sender>
      <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
    </sbdh:Sender>
    <sbdh:Receiver>
      <sbdh:Identifier Authority="GLN">1223331013844</sbdh:Identifier>
    </sbdh:Receiver>
    <sbdh:DocumentIdentification>
      <sbdh:Standard>EPCglobal</sbdh:Standard>
      <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
      <sbdh:InstanceIdentifier>201907251</sbdh:InstanceIdentifier>
      <sbdh:Type>Events</sbdh:Type>
      <sbdh:CreationDateAndTime>2019-01-09T19:12:53</sbdh:CreationDateAndTime>
    </sbdh:DocumentIdentification>
  </sbdh:StandardBusinessDocumentHeader>
  <extension>
    <EPCISMasterData>
      <VocabularyList>
        <Vocabulary type="urn:epcglobal:epcis:vtype:EPCClass">
          <VocabularyElementList>
            <VocabularyElement id="urn:epc:idpat:sgtin:068202.0401034.*">
              <attribute id="http://epcis.tracelink.com/mda/packageTypeCode">CS</attribute>
              <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">133661</attribute>
              <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">MANUFACTURER_PART_NUMBER</attribute>
              <attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">50122-
0755-67</attribute>
              <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">FDA_NDC_11</attribute>
            </VocabularyElement>
          </VocabularyElementList>
        </Vocabulary>
        <Vocabulary type="urn:epcglobal:epcis:vtype:Location">
          <VocabularyElementList>
            <!-- SourceList owning_party (sold from business party) -->
            <VocabularyElement id="urn:epc:id:sgln:088202.867701.0">
              <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>

```

```

        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">712333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">DEA</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/businessClassification">MANUFACTURER</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- SourceList location (ship from location) -->
    <VocabularyElement id="urn:epc:id:sgln:088202.867702.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">712333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">DEA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>

```

```

        <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- DestinationList owning_party (sold to business party) -->
    <VocabularyElement id="urn:epc:id:sgln:033333.101365.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Grondin Pharmacy</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">P1223330</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">HIN</attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode">PHARMACY</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">100 Main Street</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Porsmouth</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">NH</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">03801</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- DestinationList location (ship to location) -->
    <VocabularyElement id="http://epcis.gs1us.org/hc/dea/loc/12345678">
        <attribute id="urn:epcglobal:cbv:mda#name">Grondin Pharmacy</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">122333</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">COMPANYSITEID</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">100 Main Street</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Porsmouth</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>

```



```

    <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
    <attribute id="urn:epcglobal:cbv:mda#state">NH</attribute>
    <attribute id="urn:epcglobal:cbv:mda#postalCode">03801</attribute>
    <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
    <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
  </VocabularyElement>
  <!-- SourceList location (carrier party) -->
  <VocabularyElement id="urn:epc:id:sgln:064202.867703.0">
    <attribute id="urn:epcglobal:cbv:mda#name">FED EX</attribute>
    <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">180 Fedex Road</attribute>
    <attribute id="urn:epcglobal:cbv:mda#city">Atlanta</attribute>
    <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/district">456</attribute>
    <attribute id="urn:epcglobal:cbv:mda#state">GA</attribute>
    <attribute id="urn:epcglobal:cbv:mda#postalCode">31305</attribute>
    <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
    <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
  </VocabularyElement>
</VocabularyElementList>
</Vocabulary>
</VocabularyList>
</EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
  <EventList>

```

```

<ObjectEvent>
  <eventTime>2019-07-25T21:39:23.8307Z</eventTime>
  <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
  <epcList>
    <epc>urn:epc:id:sgtin:068202.0401034.11220207024595</epc>
  </epcList>
  <action>ADD</action>
  <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
  <disposition>urn:epcglobal:cbv:disp:active</disposition>
  <bizLocation>
    <id>urn:epc:id:sgln:9997777.01994.0</id>
  </bizLocation>
  <extension>
    <ilmd>
      <cbvmdata:lotNumber>L120010</cbvmdata:lotNumber>
      <cbvmdata:itemExpirationDate>2029-01-20</cbvmdata:itemExpirationDate>
      <tl:commissionEventExtensions>
        <tl:manufacturingDate>2019-07-25</tl:manufacturingDate>
      </tl:commissionEventExtensions>
    </ilmd>
  </extension>
</ObjectEvent>
<ObjectEvent>
  <eventTime>2019-07-25T21:39:24.830Z</eventTime>
  <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
  <epcList>
    <epc>urn:epc:id:sgtin:068202.0401034.11220207024594</epc>
  </epcList>
  <action>ADD</action>
  <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
  <disposition>urn:epcglobal:cbv:disp:active</disposition>
  <bizLocation>
    <id>urn:epc:id:sgln:9997777.01994.0</id>
  </bizLocation>
  <extension>
    <ilmd>
      <cbvmdata:lotNumber>L120012</cbvmdata:lotNumber>
      <cbvmdata:itemExpirationDate>2029-07-25</cbvmdata:itemExpirationDate>
      <tl:commissionEventExtensions>
        <tl:manufacturingDate>2019-07-25</tl:manufacturingDate>
      </tl:commissionEventExtensions>
    </ilmd>
  </extension>
</ObjectEvent>

```

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        </tl:commissionEventExtensions>
    </ilmd>
</extension>
</ObjectEvent>
<AggregationEvent>
    <eventTime>2019-09-25T21:39:26.8307Z</eventTime>
    <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sgtin:068202.0401034.11220207024597</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026272</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026273</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:9997777.01994.0</id>
    </bizLocation>
</AggregationEvent>
<!-- Shipping -->
<ObjectEvent>
    <eventTime>2019-07-25T21:39:27.8Z</eventTime>
    <eventTimeZoneOffset/>
    <epcList>
        <epc>urn:epc:id:sscc:005434.40000000021</epc>
    </epcList>
    <action>OBSERVE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:shipping</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_transit</disposition>
    <readPoint>
        <id>urn:epc:id:sgln:9997777.01994.0</id>
    </readPoint>
    <bizTransactionList>
        <bizTransaction type="urn:epcglobal:cbv:btt:po" date="2019-07-
25">urn:epcglobal:cbv:bt:0333331013655:45006290016</bizTransaction>
        <bizTransaction type="urn:epcglobal:cbv:btt:desadv" date="2019-07-
25">urn:epcglobal:cbv:bt:0882028677019:H9022413</bizTransaction>
    </bizTransactionList>
    <extension>
        <sourceList>

```

```

        <source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:9997777.01994.0</source>
        <source type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:9997777.01994.0</source>
        <source type="http://epcis.tracelink.com/sdt/carrier_
party">urn:epc:id:sgln:064202.867703.0</source>
    </sourceList>
    <destinationList>
        <destination type="urn:epcglobal:cbv:sdt:owning_
party">urn:epc:id:sgln:1223331.01384.0</destination>
        <destination
type="urn:epcglobal:cbv:sdt:location">urn:epc:id:sgln:1223331.01384.0</destination>
    </destinationList>
</extension>
<tl:shippingEventExtensions>
    <tl:transactionDate>2019-07-25</tl:transactionDate>
    <tl:shipToCountryCode>US</tl:shipToCountryCode>
    <tl:salesDistributionType>INCOUNTRYSALE</tl:salesDistributionType>
    <tl:supplyType>MedicalCareDistribution</tl:supplyType>
    <tl:contractType>CompetitiveBid</tl:contractType>
    <tl:dropShipmentIndicator>false</tl:dropShipmentIndicator>
    <tl:comments>Special shipment handling</tl:comments>
    <tl:contractNumber>C008</tl:contractNumber>
    <tl:fundingSource>OwnFunds</tl:fundingSource>
    <tl:entryPort></tl:entryPort>
    <tl:exitPort></tl:exitPort>
    <tl:epcOrderItemDetails>
        <tl:epcOrderItemList orderItemNumber="807">
            <tl:epcOrderItem>urn:epc:id:sgtin:068202.0401034.11220207024597</tl:epcOrderItem>
        </tl:epcOrderItemList>
    </tl:epcOrderItemDetails>
    <tl:orderItemList>
        <tl:orderItem>
            <tl:orderItemNumber>807</tl:orderItemNumber>
            <tl:packagingItemCode type="GTIN-14">00882025503022</tl:packagingItemCode>
            <cbvmda:itemExpirationDate>2029-07-25</cbvmda:itemExpirationDate>
            <tl:quantity>5</tl:quantity>
            <tl:unitPrice currencyCode="USD">100.00</tl:unitPrice>
            <tl:vat currencyCode="USD">50.00</tl:vat>
            <tl:grossPrice currencyCode="USD">150.00</tl:grossPrice>
            <tl:transactionIdentifier type="PO" date="2019-09-25">PO90</tl:transactionIdentifier>
        </tl:orderItem>
    </tl:orderItemList>

```

```

        </tl:orderItemList>
    </tl:shippingEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                       | Error Message                                                                                 | Description                                                                                      |
|------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Class 1                            |                                                                                               |                                                                                                  |
| AggregationEvent   <b>parentID</b> | Invalid EPC format !!!                                                                        | The error occurs if the serial number cannot be translated to GS1 Application Identifier format. |
|                                    | Invalid EPC format !!!                                                                        | The error occurs if the source has unrecognized content.                                         |
| @Authority                         | Valid Receiver/Identifier Authority is required !!!                                           | The error occurs if the source is present, but there is no matching entry in the lookup file.    |
|                                    | Valid Sender/Identifier Authority is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.    |
| bizLocation   <b>id</b>            | Event location in the aggregation event is required !!!                                       | The error occurs if the source is empty or null.                                                 |
|                                    | Event location in the commissioning event is required !!!                                     | The error occurs if the source is empty or null.                                                 |
| bizStep                            | bizStep urn:epcglobal:cbv:bizstep:shipping is required for ObjectEvent shipping !!!           | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:shipping".              |
|                                    | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!            | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing".               |
|                                    | bizStep urn:epcglobal:cbv:bizstep:commissioning is required for ObjectEvent commissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:commissioning".         |
| bizTransaction   <b>@type</b>      | Valid bizTransaction type is required if bizTransaction is populated !!!                      | The error occurs if cmn:BizTransaction is populated, but the source is empty or null.            |
| bizTransactionList                 | Biz transaction list is required in shipping event !!!                                        | The error occurs if the source is empty or null.                                                 |
| cbvmdata:itemExpirationDate        | Expiration date is required !!!                                                               | The error occurs if the source is empty or null. Required for GTIN and NTIN.                     |

| Data Element       | Error Message                                                                                                                                                                 | Description                                                                                                                                                                                                      |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cbvmdata:lotNumber | Lot number is required !!!                                                                                                                                                    | The error occurs if the source is empty or null. Required for GTIN and NTIN.                                                                                                                                     |
| destination        | Valid sold-to business lookup identifier type is required !!!                                                                                                                 | The error occurs if the source is empty or null.                                                                                                                                                                 |
|                    | Ship-to party identifier must match an identifier in VocabularyElement   @id !!!                                                                                              | The error occurs if no match is found between destinationList   <b>destination</b> and VocabularyElement   <b>@id</b> in the party master data header when party master address data is populated in the header. |
|                    | Valid ship-to business lookup identifier type is required !!!                                                                                                                 | The error occurs if the source is empty or null.                                                                                                                                                                 |
|                    | "urn:epcglobal:cbv:sdt:possessing_party" type in destinationList/destination is invalid !!!<br>"urn:epcglobal:cbv:sdt:location" is required if location present in source !!! | The error occurs if ship-to party address info is not present in the header master data extensions and if destination   <b>@type</b> = "urn:epcglobal:cbv:sdt:possessing_party".                                 |
| disposition        | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!!                                                                                       | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".                                                                                                                              |
|                    | Disposition urn:epcglobal:cbv:disp:in_transit is required for ObjectEvent shipping !!!                                                                                        | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_transit".                                                                                                                               |
|                    | Disposition urn:epcglobal:cbv:disp:active is required for ObjectEvent commissioning !!!                                                                                       | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:active".                                                                                                                                   |
| epc                | Invalid EPC format !!!                                                                                                                                                        | The error occurs if the serial number cannot be translated to GS1 Application Identifier format.                                                                                                                 |
|                    | Invalid EPC format !!!                                                                                                                                                        | The error occurs if the source has unrecognized content.                                                                                                                                                         |
|                    | At least one serial number in epclist is required !!!                                                                                                                         | The error occurs if the source is empty or null.                                                                                                                                                                 |
| readPoint   id     | Event location in the shipping event is required !!!                                                                                                                          | The error occurs if the source is empty or null.                                                                                                                                                                 |
| ObjectEvent        | Only one shipping event is required !!!                                                                                                                                       | The error occurs if more than one shipping event is present.                                                                                                                                                     |
|                    | Shipping event data is required !!!                                                                                                                                           | The error occurs if the source is empty or null.                                                                                                                                                                 |

| Data Element                        | Error Message                                                                                                                                                    | Description                                                                                                                                                                                            |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| source                              | Valid sold-from business lookup identifier type is required !!!                                                                                                  | The error occurs if the source is empty or null.                                                                                                                                                       |
|                                     | Valid ship-from business lookup identifier type is required !!!                                                                                                  | The error occurs if the source is empty or null.                                                                                                                                                       |
|                                     | Ship-from party identifier must match an identifier in VocabularyElement   @id !!!                                                                               | The error occurs if no match is found between sourceList   <b>source</b> and VocabularyElement   <b>@id</b> in the party master data header when party master address data is populated in the header. |
|                                     | Carrier party identifier must match an identifier in VocabularyElement   @id !!!                                                                                 | The error occurs if no match is found between sourceList   <b>source</b> and VocabularyElement   <b>@id</b> in the party master data header when party master address data is populated in the header. |
|                                     | Valid carrier business lookup identifier type is required !!!                                                                                                    | The error occurs if the source is empty or null.                                                                                                                                                       |
|                                     | "urn:epcglobal:cbv:sdt:possessing_party" type in sourceList/source is invalid !!! "urn:epcglobal:cbv:sdt:location" is required if location present in source !!! | The error occurs if ship-from party address info is not present in the header master data extensions and if source   <b>@type</b> = "urn:epcglobal:cbv:sdt:possessing_party".                          |
| tl:orderItem   <b>choice%1</b>      | One of internalMaterialCode or packagingItemCode is required !!!                                                                                                 | The error occurs if both tl:internalMaterialCode and tl:packagingItemCode are empty or null.                                                                                                           |
| tl:packagingItemCode   <b>@type</b> | Packaging item code type is required !!!                                                                                                                         | The error occurs if the source is empty or null, or source is not a valid value from the enumeration list, and tl:packagingItemCode is populated.                                                      |
| tl:packagingLevel                   | Packaging Level is required !!!                                                                                                                                  | The error occurs if the source is empty or null. Required for GTIN and NTIN.                                                                                                                           |
| tl:quantity                         | Quantity is required !!!                                                                                                                                         | The error occurs if OrderItemList is populated, but the source is empty or null.                                                                                                                       |
| tl:salesDistributionType            | Valid sales distributionType is required !!!                                                                                                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                                                                    |
| tl:shipFromCountryCode              | Valid ISO country code is required !!!                                                                                                                           | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                          |
|                                     | Ship from country for export products is required !!!                                                                                                            | The error occurs if SalesDistributionType = EXPORTSALE, EXPORTTRANSFER, or EXPORTRETURN, but the source is empty or null.                                                                              |

| Data Element                  | Error Message                                                                      | Description                                                                                                                         |
|-------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| tl:shippingEventExtensions    | shippingEventExtensions required if shipping event populated !!!                   | The error occurs if shipping event is populated, but the source is empty or null.                                                   |
| tl:shipToCountryCode          | Valid ISO country code for ship-to country is required !!!                         | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                 |
| tl:supplyType                 | Valid supply type code is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.                                       |
| tl:transactionDate            | Transaction date is required !!!                                                   | The error occurs if the source is empty or null.                                                                                    |
| tl:unitPrice   @currencyCode  | Valid ISO currency code is required !!!                                            | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                 |
| VocabularyElement             | Sold to party identifier is required !!!                                           | The error occurs if soldTo party does not exist as a VocabularyElement   @id. SoldTo party must match destinationList owning party. |
|                               | Ship from party info required in VocabularyElement if present in sourceList !!!    | The error occurs if shipFrom party is present in sourceList, but missing in source.                                                 |
|                               | Sold from party identifier is required !!!                                         | The error occurs if soldFrom party does not exist as a VocabularyElement   @id.                                                     |
|                               | Ship to party info required in VocabularyElement if present in destinationList !!! | The error occurs if shipTo party is present in sourceList, but missing in source.                                                   |
|                               | Carrier party info required in VocabularyElement if present in sourceList !!!      | The error occurs if carrier party is present in sourceList, but missing in the source.                                              |
| VocabularyElement   attribute | Ship from location street address is required !!!                                  | The error occurs if the source is empty or null.                                                                                    |
| VocabularyElement   attribute | Carrier business party street address is required !!!                              | The error occurs if the source is empty or null.                                                                                    |
| VocabularyElement   attribute | Sold from business party city is required !!!                                      | The error occurs if the source is empty or null.                                                                                    |
| VocabularyElement   attribute | Ship to business party name is required !!!                                        | The error occurs if the source is empty or null.                                                                                    |
| VocabularyElement   attribute | Sold to business party name is required !!!                                        | The error occurs if the source is empty or null.                                                                                    |
| VocabularyElement   attribute | Ship from business party name is required !!!                                      | The error occurs if the source is empty or null.                                                                                    |
| VocabularyElement   attribute | Sold from business party name is required !!!                                      | The error occurs if the source is empty or null.                                                                                    |
| VocabularyElement   attribute | Carrier business party name is required !!!                                        | The error occurs if the source is empty or null.                                                                                    |



| Data Element                         | Error Message                                                                   | Description                                                                                            |
|--------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| VocabularyElement   <b>attribute</b> | Sold to business party street address is required !!!                           | The error occurs if the source is empty or null.                                                       |
| VocabularyElement   <b>attribute</b> | Valid ship from location identifier type is required !!!                        | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.    |
| VocabularyElement   <b>attribute</b> | Ship to location street address is required !!!                                 | The error occurs if the source is empty or null.                                                       |
| VocabularyElement   <b>attribute</b> | Party type is required if additional business party identifier is populated !!! | The error occurs if additionalBusinessParty is populated, but the source is empty or null.             |
| VocabularyElement   <b>attribute</b> | Valid carrier business party identifier type is required !!!                    | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.    |
| VocabularyElement   <b>attribute</b> | Valid business classification code is required !!!                              | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.    |
| VocabularyElement   <b>attribute</b> | Valid ship to location identifier type is required !!!                          | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.    |
| VocabularyElement   <b>attribute</b> | Ship from location country is required !!!                                      | The error occurs if the source is empty or null.                                                       |
| VocabularyElement   <b>attribute</b> | Valid sold from business party identifier type is required !!!                  | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.    |
| VocabularyElement   <b>attribute</b> | Valid Ship to location country is required !!!                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.          |
| VocabularyElement   <b>attribute</b> | Valid Sold to business party country is required !!!                            | The error occurs if the source is present, but there is no matching entry in the lookup file.          |
| VocabularyElement   <b>attribute</b> | Valid sold to business party identifier type is required !!!                    | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.    |
| VocabularyElement   <b>attribute</b> | Party type is required if additional facility identifier is populated !!!       | The error occurs if additionalIdentifierType is populated, but the source is empty or null.            |
| VocabularyElement   <b>attribute</b> | Sold to business party city is required !!!                                     | The error occurs if the source is empty or null.                                                       |
| VocabularyElement   <b>attribute</b> | Sold from business party street address is required !!!                         | The error occurs if the source is empty or null.                                                       |
| VocabularyElement   <b>attribute</b> | Ship from location city is required !!!                                         | The error occurs if the source is empty or null.                                                       |
| VocabularyElement   <b>attribute</b> | Packaging Level is required if header master data is populated !!!              | The error occurs if master data is populated in the header extension, but the source is empty or null. |
| VocabularyElement   <b>attribute</b> | Valid packagingLevel code required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.          |
| VocabularyElement   <b>attribute</b> | Ship to location city is required !!!                                           | The error occurs if the source is empty or null.                                                       |

| Data Element                         | Error Message                                                         | Description                                                                                                |
|--------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| VocabularyElement   <b>attribute</b> | Ship to location state or region is required !!!                      | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Sold from business party state or region is required !!!              | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Carrier business party city is required !!!                           | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Ship from location state or region is required !!!                    | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Carrier business party state or region is required !!!                | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Carrier business party country is required !!!                        | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Valid Carrier business party country is required !!!                  | The error occurs if the source is present, but there is no matching entry in the lookup file.              |
| VocabularyElement   <b>attribute</b> | Sold from business party country is required !!!                      | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Valid Sold from business party country is required !!!                | The error occurs if the source is present, but there is no matching entry in the lookup file.              |
| VocabularyElement   <b>attribute</b> | Sold to business party country is required !!!                        | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Ship to location country is required !!!                              | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>attribute</b> | Sold to business party state or region is required !!!                | The error occurs if the source is empty or null.                                                           |
| VocabularyElement   <b>@id</b>       | Item code is required in source VocabularyElement   @id !!!           | The error occurs if the source is empty or null.                                                           |
|                                      | SGTIN or NTIN or CN-EDMC in VocabularyElement id is required !!!      | The error occurs if the source is not an SGTIN or NTIN and master data is present in the header extension. |
|                                      | Valid carrier business party identifier type is required !!!          | The error occurs if the source is empty or null.                                                           |
|                                      | Valid sold from business party identifier type is required !!!        | The error occurs if the source is empty or null.                                                           |
|                                      | Valid ship from business party identifier type is required !!!        | The error occurs if the source is empty or null.                                                           |
|                                      | Valid sold to business party identifier type is required !!!          | The error occurs if the source is empty or null.                                                           |
|                                      | Valid ship to business party identifier type is required !!!          | The error occurs if the source is empty or null.                                                           |
| <b>Class 2</b>                       |                                                                       |                                                                                                            |
| bizTransaction   <b>@date</b>        | Transaction Identifier Date is required if Ship To Country Code = RU. | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                           |
| destinationList                      | SOM Shipment inbound processing could not be completed. The           | The error occurs if the source is empty or null and:                                                       |

| Data Element                          | Error Message                                                                                                                                                                                                                                                                                                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | ReceiverInfo with either ToBusinessPartyLookupId or ToBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified.                                                                                                                                                                      | <ul style="list-style-type: none"> <li>Transfer or sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or sale export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul>                                                      |
| destinationList   destination   @type | Could not perform Master Data lookup to populate receiver business address fields. <ToBusinessPartyLookupId / type> <ToBusinessPartyLookupId> is not configured in your Company or Partner Company Master Data. Please configure <ToBusinessPartyLookupId / type> <ToBusinessPartyLookupId> in Company or Partner Company Master Data, and reprocess the file.    | The error occurs if cmn:ToBusinessPartyLookupId   @type or cmn:ToBusinessPartyLookupId is empty or null in Company or Partner Company Master Data.                                                                                                                                                                                                                                                                                                 |
|                                       | Could not perform Location Master Data lookup to populate receiver shipping address fields. <ShipToLocationLookupId / type> <ShipToLocationLookupId> is not configured in your Company or Partner Location Master Data. Please configure <ShipToLocationLookupId / type> <ShipToLocationLookupId> in Company Partner Location Master Data and reprocess the file. | The error occurs if cmn:ShipToLocationLookupId   @type or the source is empty or null in Company or Partner Location Master Data.                                                                                                                                                                                                                                                                                                                  |
| sourceList                            | SOM Shipment inbound processing could not be completed. The SenderInfo with either FromBusinessPartyLookupId or FromBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified.                                                                                                        | <p>The error occurs if the source is empty or null and:</p> <ul style="list-style-type: none"> <li>Transfer or sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or sale export from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
| sourceList   source   @type           | Could not perform Master Data lookup to populate sender business address fields. <FromBusinessPartyLookupId / type> <FromBusinessPartyLookupId> is not configured in your Company                                                                                                                                                                                 | The error occurs if cmn:FromBusinessPartyLookupId   @type or cmn:FromBusinessPartyLookupId is empty or null in Company or Partner Company Master Data.                                                                                                                                                                                                                                                                                             |

| Data Element                                                  | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Description                                                                                                                                                  |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                               | or Partner Company Master Data. Please configure<br><FromBusinessPartyLookupId / type><br><FromBusinessPartyLookupId> in Company or Partner Company Master Data, and reprocess the file.                                                                                                                                                                                                                                                                                                  |                                                                                                                                                              |
|                                                               | Could not perform Location Master Data lookup to populate sender shipping address fields. <ShipFromLocationLookupId / type><br><ShipFromLocationLookupId> is not configured in your Company Location Master Data nor in your Partner Location Master Data. Please configure <ShipFromLocationLookupId / type><br><ShipFromLocationLookupId> in Company Location Master Data or in Partner Location Master Data (if the ship from location is a partner location), and reprocess the file. | The error occurs if cmn:ShipFromLocationLookupId   <b>@type</b> or cmn:ShipFromLocationLookupId is empty or null in Company or Partner Location Master Data. |
|                                                               | Could not perform Master Data lookup to populate transportation carrier business address fields. <CarrierBusinessPartyLookupId / type> <CarrierBusinessPartyLookupId > is not configured in your Company or Partner Company Master Data. Please configure <CarrierBusinessPartyLookupId / type><br><CarrierBusinessPartyLookupId > in Company or Partner Company Master Data, and reprocess the file.                                                                                     | The error occurs if cmn:CarrierBusinessPartyLookupId   <b>@type</b> or the source is empty or null in Company or Partner Company Master Data.                |
| tl:commissionEventExtensions   <b>tl:internalMaterialCode</b> | Item Codes do not match between aggregation levels                                                                                                                                                                                                                                                                                                                                                                                                                                        | The error occurs if all packaging levels are not consistent between either tl:internalMaterialCode, tl:countryDrugCode, or both.                             |
| tl:countryDrugCode                                            | Item Codes do not match between aggregation levels                                                                                                                                                                                                                                                                                                                                                                                                                                        | The error occurs if all packaging levels are not consistent between either tl:internalMaterialCode, tl:countryDrugCode, or both.                             |
| tl:fundingSource                                              | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU.                                                                                                                                                                                                                                                                                                                                                                                                | The error occurs if both tl:shipToCountryCode and tl:shipFromCountryCode = "RU", but the source is empty or null.                                            |
| tl:OrderItemList                                              | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, Lot <Lot Number> but <EA Level Serial Number Count> item serial numbers were found.                                                                                                                                                                                                                                                                                                     | The error occurs if AllowShortVerificationCount = true, but derived quantity is greater than OrderItemQuantity.                                              |
|                                                               | Delivery <Delivery Number> could not be processed. Expected <Pick Quantity> for Item <Item Code>, Lot <Lot Number> but <EA Level Serial Number Count> item serial numbers were found.                                                                                                                                                                                                                                                                                                     | The error occurs if AllowShortVerificationCount = false, but derived quantity does not equal OrderItemQuantity.                                              |
| tl:salesDistributionType                                      | Serial Numbers with Recalled status cannot be shipped.                                                                                                                                                                                                                                                                                                                                                                                                                                    | (missing or bad snippet) salesDistributionType =                                                                                                             |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                         | Description                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   |                                                                                                                                                                                       | INCOUNTRYSALE or EXPORTSALE for sales shipments, but one or more serial numbers have a Recalled reason code.                                    |
| tl:shipFromCountryCode                                                                                                                                            | SOM Shipment inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified. | The error occurs if the sourceList and destinationList are both omitted, and tl:shipToCountryCode and tl:ShipFromCountrycode are empty or null. |
| tl:shipToCountryCode                                                                                                                                              |                                                                                                                                                                                       |                                                                                                                                                 |
| tl:transactionIdentifier   @date                                                                                                                                  | Order Item Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                      | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                                |
| tl:unitPrice                                                                                                                                                      | Unit Price is required if Ship To Country Code is RU and Ship From Country Code is any of RU, AM, BY, KZ, KG.                                                                         | The error occurs if tl:shipToCountryCode = "RU" and tl:shipFromCountryCode = "AM", "BY", "KG", "KZ", or "RU", but the source is empty or null.  |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                       |                                                                                                                                                 |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                       |                                                                                                                                                 |

# Void shipment APIs

## Why do I use these messages?

Use these messages to communicate that a delivery is cancelled or corrected. These messages use the delivery number to identify the shipment to be voided and provide a reason for the change in status.

## Which report do these messages generate?

These messages generate the [251 - Refusal Sender](#) report in the Russia Compliance application if their contents meet the report conditions.

## Void Shipment (XML)

### Guidelines

**Message Type:** SOM\_VOID\_SHIPMENT

**Info Exchange Display Name:** Void Shipment

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

ⓘ Only send top-level container serial numbers for this message.

| Data Element          | Occurs Length | Type | Description                                      |
|-----------------------|---------------|------|--------------------------------------------------|
| som:SOMVoidShipment   | 1...1<br>-    | -    | <b>Required.</b> Root element of message.        |
| som:ControlFileHeader | 1...1<br>-    | -    | <b>Required.</b> XML file control header record. |

| Data Element |  |                        |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|------------------------|--|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:FileSenderNumber   |  | 1...1<br>1/20 | String | <b>Required.</b> File sender's company identifier. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  | cmn:FileReceiverNumber |  | 1...1<br>1/20 | String | <b>Required.</b> File recipient's company identifier. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  | cmn:FileControlNumber  |  | 1...1<br>1/*  | String | <b>Required.</b> Unique file control ID number. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  | cmn:FileDate           |  | 1...1<br>1/*  | Date   | <b>Required.</b> Date file generated in XML YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  | cmn:FileTime           |  | 1...1<br>1/*  | Time   | <b>Required.</b> Time file generated in XML HH:MM:SSZ format. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  | som:MessageBody        |  | 1...1<br>-    | -      | <b>Required.</b> Main body of message.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  | cmn:DeliveryLocation   |  | 0...1<br>0/*  | String | Specifies identifier of facility/warehouse to scope the Sales Shipment Status update for the serial numbers matching the specified item code and lot number only at the specified location. If the location is omitted, the Sales Shipment status update will be applied globally to all matching serial numbers in the system. <sup>6</sup>                                                                                                                                                        |
|              |  | @type                  |  | 1...1<br>1/1  | String | <p><b>Conditionally required</b> if <b>cmn:DeliveryLocation</b> is populated. Location identifier type.<sup>7</sup></p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> |

<sup>1</sup>8888882028655<sup>2</sup>8888882028677<sup>3</sup>20160721063132<sup>4</sup>2016-07-21<sup>5</sup>06:31:32Z<sup>6</sup>8888882028655<sup>7</sup>GLN

| Data Element |  |                  |                       |                           |                | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|------------------|-----------------------|---------------------------|----------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | som:VoidShipment |                       |                           |                | 1...*<br>-    | -      | <b>Required.</b> Looping data element group for void shipment fields.                                                                                                                                                                                                                                                                                                                                                         |
|              |  |                  | cmn:DeliveryNumber    |                           |                | 1...1<br>1/*  | String | <b>Required.</b> Delivery number that links the order information to the serialized pick information for this customer delivery. Identifies the delivery document that will be voided or corrected. <sup>1</sup>                                                                                                                                                                                                              |
|              |  |                  | cmn:DeliveryDirection |                           |                | 1...1<br>1/*  | String | <b>Required.</b> Delivery direction describes whether the delivery was sent or received by the partner. Valid values: <sup>2</sup> <ul style="list-style-type: none"><li>• <code>Sent</code></li><li>• <code>Received</code></li></ul>                                                                                                                                                                                        |
|              |  |                  | cmn:PartnerId         |                           |                | 0...1<br>0/*  | String | <b>Conditionally required</b> if delivery type = <code>Received</code> . Partner ID for the delivery document. <sup>3</sup>                                                                                                                                                                                                                                                                                                   |
|              |  |                  |                       | @type                     |                | 1...1<br>1/*  | String | <b>Required.</b> Partner identifier type. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. <div> Only one of the following values may be used per message:<ul style="list-style-type: none"><li>• RU_INN_FOREIGN_ENTITY</li><li>• RU_INN_INDIV</li><li>• RU_INN_LOCAL_ENTITY</li></ul></div> |
|              |  |                  | cmn:SenderInfo        |                           |                | 0...1<br>-    | -      | Captures information about the business and location of the Partner voiding the shipment.                                                                                                                                                                                                                                                                                                                                     |
|              |  |                  |                       | cmn:FromBusinessPartyInfo |                | 0...1<br>-    | -      | Captures the full business information associated with the sold from business entity.                                                                                                                                                                                                                                                                                                                                         |
|              |  |                  |                       |                           | cmn:BusinessId | 1...*<br>1/*  | String | <b>Conditionally required</b> if <b>cmn:FromBusinessPartyInfo</b> is populated. Indicates the identifier associated with the sold from business entity.                                                                                                                                                                                                                                                                       |
|              |  |                  |                       |                           | @type          | 1...1<br>1/*  | String | <b>Conditionally required</b> if <b>cmn:BusinessId</b> is populated. Indicates the the type of sold from business identifier. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                |

<sup>1</sup>4520010<sup>2</sup>Sent<sup>3</sup>8888882028655<sup>4</sup>GLN



| Data Element |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                             |
|--------------|--|--|--------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:ShipFromLocationInfo | 0...1<br>-    | -       | Captures the full business information associated with the ship from location.                                                                                                                          |
|              |  |  | cmn:FacilityId           | 1...*<br>1/*  | String  | Indicates the identifier associated with the ship from location.                                                                                                                                        |
|              |  |  | @type                    | 1...1<br>1/*  | String  | <b>Conditionally required</b> if cmn:FacilityId is populated. Indicates the the type of sold from business identifier. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |
|              |  |  | cmn:TransactionDate      | 1...1<br>1/*  | Date    | <b>Required.</b> Date of void transaction in partner's business system. <sup>1</sup>                                                                                                                    |
|              |  |  | cmn:OrderCancelled       | 0...1<br>0/*  | Boolean | Tracks whether order is cancelled rather than the intent to correct, aligning better with future government reporting and ERP functionality. Default value is <code>false</code> . <sup>2</sup>         |
|              |  |  | cmn:ReasonCode           | 1...1<br>1/*  | String  | <b>Required.</b> Code identifying reason for the void or correction. <sup>3</sup><br>See the <a href="#">ReasonCode</a> enumeration list for valid values.                                              |
|              |  |  | cmn:ReasonText           | 0...1<br>0/*  | String  | Text description of reason code. <sup>4</sup>                                                                                                                                                           |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMVoidShipment xmlns="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager" xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>20180614063134</cmn:FileControlNumber>
    <cmn:FileDate>2018-06-14</cmn:FileDate>
    <cmn:FileTime>09:31:32Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
```

<sup>1</sup>2016-07-21

<sup>2</sup>false

<sup>3</sup>Damaged

<sup>4</sup>Damaged product

```

<cmn:DeliveryLocation type="GLN">8887771013655</cmn:DeliveryLocation>
<som:VoidShipment>
  <cmn:DeliveryNumber>4520010</cmn:DeliveryNumber>
  <cmn:DeliveryDirection>Received</cmn:DeliveryDirection>
  <cmn:PartnerId type="GLN">8888882228655</cmn:PartnerId>
  <cmn:SenderInfo>
    <cmn:FromBusinessPartyInfo>
      <cmn:BusinessId type="DUNS4">1234</cmn:BusinessId>
    </cmn:FromBusinessPartyInfo>
    </cmn:ShipFromLocationInfo>
    <cmn:FacilityId type="DUNS4">ABCD</cmn:FacilityId>
    </cmn:ShipFromLocationInfo>
  </cmn:SenderInfo>
  <cmn:TransactionDate>2018-06-14</cmn:TransactionDate>
  <cmn:OrderCancelled>false</cmn:OrderCancelled>
  <cmn:ReasonCode>Correction</cmn:ReasonCode>
  <cmn:ReasonText>Shipment to be corrected</cmn:ReasonText>qAzRGYTG32
</som:VoidShipment>
</som:MessageBody>
</som:SOMVoidShipment>

```

## Errors

| Data Element                 | Error Message                                                                              | Description                                                                                         |
|------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Class 1</b>               |                                                                                            |                                                                                                     |
| cmn:DeliveryDirection        | Delivery direction of Sent or Received is required !!!                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| cmn:DeliveryLocation   @type | DeliveryLocation type attribute is required when source delivery location is populated !!! | The error occurs if <b>cmn:DeliveryLocation</b> is populated, but the source is empty or null.      |
|                              | Valid delivery location type is required !!!                                               | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| cmn:PartnerId   @type        | Party type attribute is required when source partner Id is populated !!!                   | The error occurs if <b>cmn:PartnerId</b> is populated, but the source is empty or null.             |
|                              | Valid partner identifier type is required !!!                                              | The error occurs if the source is present, but there is no matching entry in the lookup file.       |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                 | Description                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| cmn:PartnerId                                                                                                                                                     | Partner identifier is required for delivery direction Received !!!                                                                            | The error occurs if DeliveryDirection = <b>Received</b> , but source is empty or null.        |
| cmn:ReasonCode                                                                                                                                                    | Valid reason code is required !!!                                                                                                             | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| cmn:TransactionDate                                                                                                                                               | Transaction date is required !!!                                                                                                              | The error occurs if the source is empty or null.                                              |
| <b>Class 2</b>                                                                                                                                                    |                                                                                                                                               |                                                                                               |
| cmn:DeliveryNumber                                                                                                                                                | Delivery [Delivery Number]: Shipment transaction for specified delivery number must be a sales shipment. Transfer shipment may not be voided. | The error occurs if source refers to a transfer shipment instead of a sales shipment.         |
|                                                                                                                                                                   | Delivery [Delivery Number]: Shipment transaction for specified delivery number has not been submitted.                                        | The error occurs if source does not refer to a shipment in a submitted state.                 |
|                                                                                                                                                                   | Delivery [Delivery Number]: The serial numbers for the specified deliver must be in a Commissioned - Shipped state.                           | The error occurs if serial numbers are not in a Commissioned - Shipped state.                 |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                               |                                                                                               |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                               |                                                                                               |

## Void Shipment (EPCIS v1.2)

### Guidelines

**Message Type:** SOM\_VOID\_SHIPMENT

**Info Exchange Display Name:** Void Shipment

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element        |  | Occurs Length | Type | Description                                  |
|---------------------|--|---------------|------|----------------------------------------------|
| epcis:EPCISDocument |  | 1..1          | -    | <b>Required.</b> EPCIS message root element. |

| Data Element   |                                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|-------------------------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| @schemaVersion |                                     | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| @creationDate  |                                     | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| EPCISHeader    |                                     | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                | sbdh:StandardBusinessDocumentHeader | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                | sbdh:HeaderVersion                  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <a href="#">1.0</a> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                | sbdh:Sender                         | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                | sbdh:Identifier                     | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> <div>  GLNs do not have an urn/http prefix. </div> |
|                | @Authority                          | 1...1<br>1/*  | String   | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>5</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                          |
|                | sbdh:ContactInformation             | 0...*         | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>1.2<sup>2</sup>2019-03-31T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|-----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |               |        | organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | sbdh:Receiver               | 1...*<br>-    | -      | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> <div> <p>① GLNs do not have an urn/http prefix.</p> </div> |
|              |  |  | sbdh:Identifier             | 1...1<br>1/*  | String | <p><b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to "GLN" for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>2</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                   |
|              |  |  | @Authority                  | 1...1<br>1/*  | String | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | sbdh:ContactInformation     | 0...*<br>-    | -      | <p><b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <code>EPCglobal</code>.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -      | <p><b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <code>1.0</code>.<sup>4</sup></p>                                                                                                                                                                                                                                                                        |
|              |  |  | sbdh:Standard               | 1...1<br>0/*  | String | <p><b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others.<sup>5</sup></p>                                                                                                                                                                                                                                                                                                   |
|              |  |  | sbdh:TypeVersion            | 1...1<br>0/*  | String | <p><b>Required.</b> The document type. The Type value is set to "Events" for a void shipment event.<sup>6</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCglobal<sup>4</sup>1.0<sup>5</sup>000001<sup>6</sup>Events

| Data Element |           |           |             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|-----------|-----------|-------------|--------------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |           |             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>1</sup>                                                                                                                               |
|              |           |           |             | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> The document type. The Type value is set to "Events" for a take product sample event. <sup>2</sup>                                                                                                                                                                                                                                                                                                         |
|              |           |           |             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> EPCIS message root element.                                                                                                                                                                                                                                                                                                                                                                                |
|              | EPCISBody |           |             |                          | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                         |
|              |           | EventList |             |                          | 1...1<br>-    | -        | <b>Required.</b> Only one <b>ObjectEvent</b> will be present in the EventList for the Void Shipment message.                                                                                                                                                                                                                                                                                                                |
|              |           |           | choice      |                          | 1...*<br>-    | Choice   | <b>Required.</b> Only <b>ObjectEvent</b> may be selected for EPCISBody   <b>EventList</b> .                                                                                                                                                                                                                                                                                                                                 |
|              |           |           | ObjectEvent |                          | 1...*<br>-    | -        | <b>Required.</b> Choice 1 for <b>EventList</b> . Data = ObjectEvent for the Void Shipment message Events. <b>EventList</b> = ObjectEvent Void Shipment when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <b>OBSERVE</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:void_shipping</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul> |
|              |           |           |             | eventTime                | 1...1<br>1/*  | DateTime | <b>Required.</b> This field indicates the time stamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the "Z" to be appended; however if it is not included, the system assumes that the time is GMT and therefore appends the Z. <sup>3</sup>                                                                                      |
|              |           |           |             | recordTime               | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |           |           |             | eventTimeZoneOffset      | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at the time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>4</sup>                                                                                                                                                                                                                     |

<sup>1</sup>2018-04-30T22:08:02Z<sup>2</sup>Events<sup>3</sup>2016-09-18T22:08:02Z<sup>4</sup>-04:00

| Data Element |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                            |
|--------------|--|--|--------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | baseExtension      | 1...1<br>-    | -      | Not used.                                                                                                                                                              |
|              |  |  | epcList            | 0...*<br>1/*  | String | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                              |
|              |  |  | epc                | 1...1<br>0/*  | String | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>1</sup>                            |
|              |  |  | action             | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>action</b> value must equal <b>OBSERVE</b> . <sup>2</sup>                                                                                      |
|              |  |  | bizStep            | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:void_shipping</b> . <sup>3</sup>                                                     |
|              |  |  | disposition        | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>4</sup>                                                      |
|              |  |  | readPoint          | 0...1<br>-    | -      | This field identifies the location where the event occurred, i.e. the warehouse GLN location ID and storage location (e.g. shelf, bin), in URN format.                 |
|              |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup>         |
|              |  |  | extension          | 0...1<br>-    | -      | Not used - GS1 Reserved.                                                                                                                                               |
|              |  |  | bizLocation        | 1...1<br>1/*  | AnyURI | <b>Required.</b> This value indicates the SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. |
|              |  |  | id                 | 0...1<br>-    | -      | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>6</sup>         |
|              |  |  | bizTransactionList | 0...1<br>-    | -      | <b>Required.</b> Business documents required for void shipping message. Delivery document is mandatory.                                                                |

<sup>1</sup>urn:epc:id:sgtin:068202.0401034.11220207026272<sup>2</sup>OBSERVE<sup>3</sup>urn:epcglobal:cbv:bizstep:void\_shipping<sup>4</sup>urn:epcglobal:cbv:disp:in\_progress<sup>5</sup>urn:epc:id:sgln:7777776.67345.0<sup>6</sup>urn:epc:id:sgln:7777776.67345.0

| Data Element |  |  |  |  |                | Occurs Length                                                                                                      | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|----------------|--------------------------------------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | bizTransaction | 1...*<br>0/*                                                                                                       | String | <p><b>Required.</b> The business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or Invoice and/or Purchase Order governing the shipment being voided, subject to Section 8.4.2 of [CBV1.0].<sup>1</sup></p> <p>The GLN that occurs after <code>urn:epcglobal:cbv:bt:</code> is the GLN of the party that issued the number (e.g. if the customer issues a PO Number, the customer GLN is entered. If the supplier issues ASN/delivery number, the supplier GLN is entered).</p> <p>Delivery document (ASN) is mandatory but all document types are supported.</p> |
|              |  |  |  |  | @type          | 1...1<br>1/*                                                                                                       | String | <p><b>Required.</b> The transaction identifier type.. DESADV is the only biz transaction type that will be mapped. Valid value:<sup>2</sup></p> <ul style="list-style-type: none"> <li><code>urn:epcglobal:cbv:btt:desadv</code> = Shipment Notification Number</li> </ul> <p>Other types may be present in source file but if shipping document is missing an error will be thrown.</p>                                                                                                                                                                                                     |
|              |  |  |  |  | extension      | (missing or bad snippet)0...1<br>(missing or bad snippet)<br>(missing or bad snippet)–<br>(missing or bad snippet) | -      | Indicates extension body for the shipping event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | sourceList     | (missing or bad snippet)0...1<br>(missing or bad snippet)<br>(missing or bad snippet)–<br>(missing or bad snippet) | -      | <p>Captures the sending business, location, and carrier parties for the delivery. Supports one of two functions:</p> <ul style="list-style-type: none"> <li>If the <b>VocabularyElement</b> is populated with the party address in master data, the <b>sourceList</b> identifies the sold to and ship to parties. The party master data is mapped from the <b>VocabularyElement</b>.</li> <li>If the <b>VocabularyElement</b> is not populated with party address from master data, the <b>sourceList</b> party identifiers are used to look up the party address in master data.</li> </ul> |
|              |  |  |  |  | source         | (missing or bad snippet)0...*<br>(missing or                                                                       | String | <p>Captures the source party identifier for the sold from, ship from, or carrier parties. The party identifier in the source either:</p> <ul style="list-style-type: none"> <li>Identifies the sold from, ship from, or carrier party in the <b>VocabularyElement</b>. The party address info is mapped from the <b>VocabularyElement</b>. Nothing is mapped from the <b>VocabularyElement</b> if</li> </ul>                                                                                                                                                                                 |

<sup>1</sup>urn:epcglobal:cbv:bt:777776067344:8047889791<sup>2</sup>urn:epcglobal:cbv:btt:desadv



| Data Element |  |  |  |  |  |  | Occurs Length                                                                    | Type | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|--|--|----------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | bad snippet)<br>(missing or<br>bad<br>snippet)0/*<br>(missing or<br>bad snippet) |      | <p>there is no match between the party identifier in the <b>sourceList</b>   source and <b>VocabularyElement</b> [<b>@id</b>].</p> <p>or</p> <ul style="list-style-type: none"> <li>The <b>sourceList</b>   source elements are used to perform a master data lookup if the <b>VocabularyElement</b> is not populated or there is no match between party identifiers in the source and <b>VocabularyElement</b>[@id] elements.</li> </ul> <p>Valid values:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:</a></li> <li><a href="#">http://epcis.tracelink.com/hc/companyId/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/companySiteId/loc/</a></li> <li><a href="#">http://epcis.gs1us.org/hc/duns/loc/</a></li> <li><a href="#">http://epcis.gs1us.org/hc/duns_plus_four/loc/</a></li> <li><a href="#">http://epcis.gs1us.org/hc/dea/loc/</a></li> <li><a href="#">http://epcis.gs1us.org/hc/hin/loc/</a></li> <li><a href="#">http://epcis.gs1br.org/hc/cpf/loc/</a></li> <li><a href="#">http://epcis.gs1br.org/hc/cnes/loc/</a></li> <li><a href="#">http://epcis.gs1br.org/hc/cnpj/loc/</a></li> <li><a href="#">http://epcis.gs1br.org/hc/professionalReg/loc/</a></li> <li><a href="#">http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/gcp/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/in_company_id/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/in_location_id/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/kr_provider_code/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/cuit/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/in_iec/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/in_pan/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/in_tin/loc/</a></li> <li><a href="#">http://epcis.tracelink.com/hc/ru_account_number/loc/</a></li> </ul> |

| Data Element |  |  |  |  |                 |       | Occurs Length                                                                                                        | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|--|-----------------|-------|----------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                 |       |                                                                                                                      |        | <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_indiv/loc/">http://epcis.tracelink.com/hc/ru_inn_indiv/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/">http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_mfr/loc/">http://epcis.tracelink.com/hc/in_mfr/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_mrch/loc/">http://epcis.tracelink.com/hc/in_mrch/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_gstn/loc/">http://epcis.tracelink.com/hc/in_gstn/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_foreign_mah/loc/">http://epcis.tracelink.com/hc/cn_foreign_mah/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/">http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_usid/loc/">http://epcis.tracelink.com/hc/cn_usid/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/am_tin/loc/">http://epcis.tracelink.com/hc/am_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/by_tin/loc/">http://epcis.tracelink.com/hc/by_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kz_bin/loc/">http://epcis.tracelink.com/hc/kz_bin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/">http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kg_tin/loc/">http://epcis.tracelink.com/hc/kg_tin/loc/</a></li> </ul> <p> If the sold from party is the same as the ship from party, the ship from identifier does not need to be sent.</p> |
|              |  |  |  |  |                 | @type | (missing or bad snippet)1...*<br>(missing or bad snippet)<br>(missing or bad snippet)0/*<br>(missing or bad snippet) | String | <p><b>Conditionally required</b> if <b>source</b> is populated. Captures the type of source party identifier. Valid values:</p> <ul style="list-style-type: none"> <li>Sold from party = <a href="#">urn:epcglobal:cbv:sdt:owning_party</a> – The type of identifier used for the business entity transferring ownership of the goods. Value required if <b>source</b> is present and ship from party is the same as the business entity that owns the goods.</li> <li>Ship from party = <a href="#">urn:epcglobal:cbv:sdt:location</a> – The type of identifier used for the location that ships the goods. Value required if <b>source</b> is present and the ship from party is different from the business entity that owns the goods.</li> <li>Carrier party = <a href="http://epcis.tracelink.com/sdt/carrier_party">http://epcis.tracelink.com/sdt/carrier_party</a> – The type of identifier used for the party that ships the goods.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | destinationList |       | (missing or bad                                                                                                      | -      | <p>Captures the receiving business or location parties and supports one of two functions:</p> <ul style="list-style-type: none"> <li>If the <b>VocabularyElement</b> is populated with the party address in master data, the</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Data Element |  |  |  |  |             | Occurs Length                                                                                                        | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|-------------|----------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |             | snippet)0...1<br>(missing or bad snippet)<br>(missing or bad snippet)–<br>(missing or bad snippet)                   |        | <p><b>destinationList</b> identifies the sold to and ship to parties. The party master data is mapped from <b>VocabularyElement</b>.</p> <ul style="list-style-type: none"> <li>If the <b>VocabularyElement</b> is not populated with party address from master data, the <b>destinationList</b> party identifiers are used to look up the party address in master data.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | destination | (missing or bad snippet)0...*<br>(missing or bad snippet)<br>(missing or bad snippet)0/*<br>(missing or bad snippet) | String | <p>Captures the destination party identifier for the sold to or ship to parties. Party identifier in destination either:</p> <ul style="list-style-type: none"> <li>Identifies the sold from or ship from parties in the <b>VocabularyElement</b>. The party address info is mapped from the <b>VocabularyElement</b>. Nothing is mapped from the <b>VocabularyElement</b> if there is no match between the party identifier in the <b>destinationList</b>   destination and <b>VocabularyElement</b> [<b>@id</b>] elements.</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>The <b>destinationList</b>   destination elements are used to perform a master data lookup if the <b>VocabularyElement</b> is not populated or there is no match between party identifiers in the source and <b>VocabularyElement</b> [<b>@id</b>] elements.</li> </ul> <p>Valid values:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:</a></li> <li><a href="http://epcis.tracelink.com/hc/companyId/loc/">http://epcis.tracelink.com/hc/companyId/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/companySiteId/loc/">http://epcis.tracelink.com/hc/companySiteId/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/duns/loc/">http://epcis.gs1us.org/hc/duns/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/duns_plus_four/loc/">http://epcis.gs1us.org/hc/duns_plus_four/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/dea/loc/">http://epcis.gs1us.org/hc/dea/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/hin/loc/">http://epcis.gs1us.org/hc/hin/loc/</a></li> <li><a href="http://epcis.gs1br.org/hc/cpf/loc/">http://epcis.gs1br.org/hc/cpf/loc/</a></li> <li><a href="http://epcis.gs1br.org/hc/cnes/loc/">http://epcis.gs1br.org/hc/cnes/loc/</a></li> <li><a href="http://epcis.gs1br.org/hc/cnpj/loc/">http://epcis.gs1br.org/hc/cnpj/loc/</a></li> <li><a href="http://epcis.gs1br.org/hc/professionalReg/loc/">http://epcis.gs1br.org/hc/professionalReg/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/">http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/gcp/loc/">http://epcis.tracelink.com/hc/gcp/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_company_id/loc/">http://epcis.tracelink.com/hc/in_company_id/loc/</a></li> </ul> |

| Data Element |  |  |  |  |  |       |                 | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|--|-------|-----------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |       |                 |               |        | <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/in_location_id/loc/">http://epcis.tracelink.com/hc/in_location_id/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kr_provider_code/loc/">http://epcis.tracelink.com/hc/kr_provider_code/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/">http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cuit/loc/">http://epcis.tracelink.com/hc/cuit/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_iec/loc/">http://epcis.tracelink.com/hc/in_iec/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_pan/loc/">http://epcis.tracelink.com/hc/in_pan/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_tin/loc/">http://epcis.tracelink.com/hc/in_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_account_number/loc/">http://epcis.tracelink.com/hc/ru_account_number/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_indiv/loc/">http://epcis.tracelink.com/hc/ru_inn_indiv/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/">http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_mfr/loc/">http://epcis.tracelink.com/hc/in_mfr/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_mrch/loc/">http://epcis.tracelink.com/hc/in_mrch/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_gstn/loc/">http://epcis.tracelink.com/hc/in_gstn/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_foreign_mah/loc/">http://epcis.tracelink.com/hc/cn_foreign_mah/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/">http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_usid/loc/">http://epcis.tracelink.com/hc/cn_usid/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/am_tin/loc/">http://epcis.tracelink.com/hc/am_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/by_tin/loc/">http://epcis.tracelink.com/hc/by_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kz_bin/loc/">http://epcis.tracelink.com/hc/kz_bin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/">http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kg_tin/loc/">http://epcis.tracelink.com/hc/kg_tin/loc/</a></li> </ul> <p> If the sold from party is the same as the ship from party, the ship from identifier does not need to be sent.</p> |
|              |  |  |  |  |  | @type | (missing or bad |               | String | (missing or bad snippet) if <b>destination</b> is populated. Captures the type of destination party identifier. Valid values: <ul style="list-style-type: none"> <li>Sold to party = <a href="#">urn:epcglobal:cbv:sdt:owning_party</a> – Value required if <b>destination</b> is</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| Data Element |  |  |  |                        |                      |  | Occurs Length                                                                                        | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|------------------------|----------------------|--|------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                        |                      |  | snippet)1...*<br>(missing or bad snippet)<br>(missing or bad snippet)0/*<br>(missing or bad snippet) |        | <p>present and the ship from party is the same as the business entity that receives the goods.</p> <ul style="list-style-type: none"> <li>Ship from party = <code>urn:epcglobal:cbv:sdt:location</code> – Value required if <b>destination</b> is present and the ship to party is different from the business entity that receives the goods.</li> </ul>                                                                                                   |
|              |  |  |  | tl:locationId          |                      |  | 0...1<br>-                                                                                           | -      | Specifies identifier of facility/warehouse to scope the void shipping message for the delivery at the specified location. <sup>1</sup>                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |                        | @type                |  | 0...1<br>-                                                                                           | -      | <p><b>Required.</b> Attribute that identifies location types.<sup>2</sup></p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> |
|              |  |  |  | tl:voidEventExtensions |                      |  | 1...1<br>-                                                                                           | -      | Extensions used for Commission ObjectEvent.                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |                        | tl:deliveryDirection |  | 0...1<br>0/*                                                                                         | String | <p><b>Required.</b> Indicates whether the delivery is sent or received by the Partner. Determines if the message is for voiding a shipment or receipt.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li><code>Sent</code> – The delivery is sent by the Partner.</li> <li><code>Received</code> – The delivery is received by the Partner.</li> </ul>                                                                                        |
|              |  |  |  |                        | tl:partnerId         |  | 1...1<br>0/*                                                                                         | String | <b>Conditionally required</b> if delivery direction = <code>Received</code> . Partner ID for the delivery document. <sup>3</sup>                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>7777776067344<sup>2</sup>GLN<sup>3</sup>8888882028677

| Data Element |  |  |  |  |                      | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|----------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | @type                | 1...1<br>0/*  | String  | <p><b>Required.</b> Partner identifier type.<sup>1</sup></p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div>                  |
|              |  |  |  |  | tl:transactionDate   | 1...1<br>1/*  | Date    | <b>Required.</b> User-specified date for Serialized Operations Manager Void message in XML date format YYYY-MM-DD. <sup>2</sup>                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | tl:orderCancelled    | 0...1<br>0/*  | Boolean | <p>Replaces CorrectShipment. Tracks whether order is cancelled rather than intent to correct, aligning better with future government reporting and ERP functionality. Default value is <b>false</b>. Valid values:<sup>3</sup></p> <ul style="list-style-type: none"> <li><b>false</b> = Original order voided and may or may not be corrected at a later time.</li> <li><b>true</b> = Original order voided and cancelled. Cannot be corrected.</li> </ul> |
|              |  |  |  |  | tl:changeReasonCode  | 1...1<br>0/*  | String  | <p><b>Required.</b> Code identifying reason for the void or correction.<sup>4</sup></p> <p>See the <a href="#">ReasonCodes</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | tl:reasonDescription | 0...1<br>0/*  | String  | Text description of reason code. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                               |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:tl="http://epcis.tracelink.com/ns" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:gslushc="http://epcis.gslus.org/hc/ns">
```

<sup>1</sup>GLN

<sup>2</sup>2016-09-18

<sup>3</sup>false

<sup>4</sup>Correction

<sup>5</sup>Shipment to be corrected

```

xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2018-06-14T08:31:32Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8887771013655</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>2018083006310033</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2018-06-14T08:31:32Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2018-06-14T08:31:32Z</eventTime>
        <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
        <epcList>
          <epc>urn:epc:id:sgtin:068202.0401034.11220207024592</epc>
          <epc>urn:epc:id:sgtin:068202.0401034.11220207024593</epc>
        </epcList>
        <action>OBSERVE</action>
        <bizStep>urn:epcglobal:cbv:bizstep:void_shipping</bizStep>
        <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
        <bizLocation>
          <id>urn:epc:id:sgln:8887777.01384.0</id>
        </bizLocation>
        <bizTransactionList>
          <bizTransaction
type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:8887771013655:8047889791</bizTransaction>
        </bizTransactionList>
        <tl:locationId type="GLN">8887771013655</tl:locationId>

```

```

    <tl:voidEventExtensions>
      <tl:partnerId type="GLN">6667771013655</tl:partnerId>
      <gslushc:transactionDate>2018-06-13</gslushc:transactionDate>
      <tl:orderCancelled>true</tl:orderCancelled>
      <tl:changeReasonCode>DamagedInTransit</tl:changeReasonCode>
      <tl:reasonDescription>Delivery truck was involved in an accident and product was damaged. New
delivery will be sent.</tl:reasonDescription>
    </tl:voidEventExtensions>
  </ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                 | Error Message                                                                                 | Description                                                                                                                          |
|------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>               |                                                                                               |                                                                                                                                      |
| action                       | action OBSERVE is required for ObjectEvent void shipping !!!                                  | The error occurs if the source does not equal <b>OBSERVE</b> .                                                                       |
| bizStep                      | bizStep urn:epcglobal:cbv:bizstep:void_shipping is required for ObjectEvent void shipping !!! | The error occurs if the source does not equal <b>urn:epcglobal:cbv:bizstep:void_shipping</b> .                                       |
| bizTransaction               | Delivery document is required !!!                                                             | The error occurs if bizTransaction   <b>@type</b> does not equal <b>urn:epcglobal:cbv:bt:desadv</b> , or if source is empty or null. |
|                              | Unable to parse data. bizTransaction must begin with urn:epcglobal:cbv:bt: !!!                | The error occurs if the source does not begin with string <b>urn:epcglobal:cbv:bt:</b> .                                             |
| disposition                  | Disposition urn:epcglobal:cbv:disp:in_progress is required for ObjectEvent void shipping !!!  | The error occurs if the source does not equal <b>urn:epcglobal:cbv:disp:in_progress</b> .                                            |
| ObjectEvent                  | At least one ObjectEvent for void shipment transaction is required !!!                        | The error occurs if the source input file does not include at least one <b>ObjectEvent</b> .                                         |
|                              | Only one ObjectEvent for the void shipment transaction is required !!!                        | The error occurs if more than one <b>ObjectEvent</b> is present.                                                                     |
| tl:changeReasonCode          | Valid reason code is required !!!                                                             | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                  |
| tl:locationId   <b>@type</b> | Valid location identifier type is required !!!                                                | The error occurs if the source is present, but there is no matching entry in the lookup file.                                        |



| Data Element                                                                                                                                                      | Error Message                                                                                                                                 | Description                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| tl:partnerId   @type                                                                                                                                              | Party type attribute is required when source partner Id is populated !!!                                                                      | The error occurs if <b>cmn:PartnerId</b> is populated, but the source is empty or null.                |
|                                                                                                                                                                   | Valid partner identifier type is required !!!                                                                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.          |
| <b>Class 2</b>                                                                                                                                                    |                                                                                                                                               |                                                                                                        |
| cmn:DeliveryNumber                                                                                                                                                | Delivery [Delivery Number]: Shipment transaction for specified delivery number must be a sales shipment. Transfer shipment may not be voided. | The error occurs if the specified delivery number refers to a transfer shipment, not a sales shipment. |
|                                                                                                                                                                   | Delivery [Delivery Number]: Shipment transaction for specified delivery number has not been submitted.                                        | The error occurs if the specified delivery number does not refer to a shipment in a submitted state.   |
|                                                                                                                                                                   | Delivery [Delivery Number]: The serial numbers for the specified deliver must be in a Commissioned - Shipped state.                           | The error occurs if the serial numbers are not in a Commissioned - Shipped state.                      |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                               |                                                                                                        |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                               |                                                                                                        |

## ESM Void Shipment (EPCIS v1.2)

### Guidelines

**Message Type:** SOM\_ESM\_VOID\_SHIPMENT

**Info Exchange Display Name:** ESM Void Shipment

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element        | Occurs Length | Format | Description                                  |
|---------------------|---------------|--------|----------------------------------------------|
| epcis:EPCISDocument | 1...1         | -      | <b>Required.</b> EPCIS message root element. |

| Data Element   |                                     |                         |            | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------|-------------------------------------|-------------------------|------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| @schemaVersion |                                     |                         |            | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| @creationDate  |                                     |                         |            | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EPCISHeader    |                                     |                         |            | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                | sbdh:StandardBusinessDocumentHeader |                         |            | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                |                                     | sbdh:HeaderVersion      |            | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <a href="#">1.0</a> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                |                                     | sbdh:Sender             |            | 1...<br>-     | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                     |
|                |                                     | sbdh:Identifier         |            | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup></p> <p>Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <p> GLNs do not have a urn/http prefix.</p> |
|                |                                     |                         | @Authority | 1...1<br>1/*  | String   | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                         |
|                |                                     | sbdh:ContactInformation |            | 0...<br>-     | -        | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                |                                     | sbdh:Receiver           |            | 1...<br>-     | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that                                                                                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>1.2<sup>2</sup>2013-10-01T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |  |                             | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|-----------------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |               |          | receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | sbdh:Identifier             | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p> GLNs do not have a urn/http prefix.</p> |
|              |  |  | @Authority                  | 1...1<br>1/*  | String   | <b>Required.</b> The receiver identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>2</sup>                                                                                                                                                                                                                                                                |
|              |  |  | sbdh:ContactInformation     | 0...*<br>-    | -        | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | sbdh:Standard               | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | sbdh:TypeVersion            | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b> . <sup>4</sup>                                                                                                                                                                                                                                   |
|              |  |  | sbdh:InstanceIdentifier     | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>5</sup>                                                                                                                                                                                                                                                         |
|              |  |  | sbdh:Type                   | 1...1<br>0/*  | String   | <b>Required.</b> Document type. The <b>Type</b> value is set to <b>Events</b> for a shipping event. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | sbdh:CreationDateAndTime    | 1...1         | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCglobal<sup>4</sup>1.0<sup>5</sup>000001<sup>6</sup>Events

| Data Element |           |           |             |                     | Occurs Length | Format   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|-----------|-----------|-------------|---------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |           |             |                     |               |          | to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the Z. <sup>1</sup>                                                                                                                                                                                                                                                                                                                    |
|              | EPCISBody |           |             |                     | 1...1<br>-    | -        | <b>Required.</b> The main body of the shipment message.                                                                                                                                                                                                                                                                                                                                                                                              |
|              |           | EventList |             |                     | 1...1<br>-    | -        | <b>Required.</b> The <b>EventList</b> includes one <b>ObjectEvent</b> for shipping.                                                                                                                                                                                                                                                                                                                                                                  |
|              |           |           | choice      |                     | 1...*<br>-    | Choice   | <b>Required.</b> Only <b>ObjectEvent</b> may be selected for <b>EventList</b> .                                                                                                                                                                                                                                                                                                                                                                      |
|              |           |           | ObjectEvent |                     | 1...*<br>-    | -        | <b>Required.</b> Indicates the transaction type. Choice 1 for the <b>EventList</b> . Data = <b>ObjectEvent</b> for the commissioning events.<br><b>EventList = ObjectEvent</b> when all of the following is true: <ul style="list-style-type: none"> <li>• <b>action</b> = <b>OBSERVE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:shipping</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul> |
|              |           |           |             | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the Z to be appended if it is not included; however, the system assumes that the time is GMT and therefore appends the Z. <sup>2</sup>                                                                      |
|              |           |           |             | recordTime          | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |           |           |             | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for eventTime. A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time, whether it is standard time or Daylight saving time. Per Section 7.2.8 of [EPCIS1.0.1]. <sup>3</sup>                                                                                 |
|              |           |           |             | epcList             | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of topmost containers (e.g. pallets, cases) in the shipment.                                                                                                                                                                                                                                                                                                                                                       |
|              |           |           |             | epc                 | 0...*<br>1/*  | String   | The identifier of the epc type in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>4</sup>                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>2013-10-01T22:08:02Z<sup>2</sup>2016-09-18T22:08:02Z<sup>3</sup>-04:00<sup>4</sup>urn:epc:id:sgtin:068202.0401034.11220207026272

| Data Element |  |  |  |                    | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | action             | 0...1<br>0/*  | AnyURI | <b>Required.</b> The action type of the event. The <b>action</b> value must equal <b>OBSERVE</b> for a shipping event. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | bizStep            | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:void_shipping</b> for a shipping event. <sup>2</sup>                                                                                                                                                                                                                                                                                        |
|              |  |  |  | disposition        | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> and <b>disposition</b> fields define the message event and are grouped together under the GS1 EPCIS guidelines. The <b>disposition</b> indicates the status of the message. The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>3</sup>                                                                                                                                                    |
|              |  |  |  | readPoint          | 0...1<br>-    | -      | Identifies the location where the event occurred; that is, the warehouse GLN location ID and storage location (e.g. shelf, bin) that recorded the shipping event, in URN format.                                                                                                                                                                                                                                                                                    |
|              |  |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a finer-grain location identifier. <sup>4</sup>                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | extension          | 0...1<br>-    | -      | Not used - GS1 Reserved.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | bizLocation        | 1...1<br>1/*  | AnyURI | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | id                 | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | bizTransactionList | 1...1<br>-    | -      | <b>Required.</b> This element contains a list of the business transaction identifiers.                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | bizTransaction     | 1...1<br>0/*  | String | <b>Required.</b> The business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or Invoice and/or Purchase Order governing this shipment, which are subject to Section 8.4.2 of (CBV1.0). The GLN that occurs after <b>urn:epcglobal:cbv:bt:</b> is the GLN of the party that issued the number (e.g. if customer issues PO Number, customer GLN is entered. If supplier issues ASN/delivery number, supplier GLN is entered). <sup>5</sup> |
|              |  |  |  | @type              | 1...1<br>1/*  | String | <b>Required.</b> The transaction identifier type using the supported enumeration values. <b>DESADV</b> is the only biz transaction type that will be mapped. <sup>6</sup>                                                                                                                                                                                                                                                                                           |

<sup>1</sup>OBSERVE<sup>2</sup>urn:epcglobal:cbv:bizstep:void\_shipping<sup>3</sup>urn:epcglobal:cbv:disp:in\_progress<sup>4</sup>urn:epc:id:sgln:7777776.67345.0<sup>5</sup>urn:epcglobal:cbv:bt:7777776067344:8047889791<sup>6</sup>urn:epcglobal:cbv:btt:desadv

| Data Element |  |  |  |           |            |        | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|-----------|------------|--------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |            |        |               |        | <ul style="list-style-type: none"> <li><code>urn:epcglobal:cbv:btt:desadv</code> = Shipment Notification Number</li> </ul> <p>Other types may be present in source file, but if shipping document is missing an error will be thrown.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | extension |            |        | -<br>-        | -      | Indicates extension body for the shipping event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |           | sourceList |        | 0...1<br>-    | -      | <p>Captures the sending business, location, and carrier parties for the delivery. Supports one of two functions:</p> <ul style="list-style-type: none"> <li>If the <b>VocabularyElement</b> is populated with the party address in master data, the <b>sourceList</b> identifies the sold to and ship to parties. The party master data is mapped from the <b>VocabularyElement</b>.</li> <li>If the <b>VocabularyElement</b> is not populated with party address from master data, the <b>sourceList</b> party identifiers are used to look up the party address in master data.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |           |            | source | 0...*<br>0/*  | String | <p>Captures the source party identifier for the sold from, ship from, or carrier parties. The party identifier in the source either:</p> <ul style="list-style-type: none"> <li>Identifies the sold from, ship from, or carrier party in the <b>VocabularyElement</b>. The party address info is mapped from the <b>VocabularyElement</b>. Nothing is mapped from the <b>VocabularyElement</b> if there is no match between the party identifier in the <b>sourceList</b>   source and <b>VocabularyElement[@id]</b>.</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>The <b>sourceList</b>   source elements are used to perform a master data lookup if the <b>VocabularyElement</b> is not populated or there is no match between party identifiers in the source and <b>VocabularyElement[@id]</b> elements.</li> </ul> <p>Valid values:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:</code></li> <li><code>http://epcis.tracelink.com/hc/companyId/loc/</code></li> <li><code>http://epcis.tracelink.com/hc/companySiteId/loc/</code></li> <li><code>http://epcis.gs1us.org/hc/duns/loc/</code></li> <li><code>http://epcis.gs1us.org/hc/duns_plus_four/loc/</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/</code></li> <li><code>http://epcis.gs1us.org/hc/hin/loc/</code></li> <li><code>http://epcis.gs1br.org/hc/cpf/loc/</code></li> <li><code>http://epcis.gs1br.org/hc/cnes/loc/</code></li> <li><code>http://epcis.gs1br.org/hc/cnpj/loc/</code></li> <li><code>http://epcis.gs1br.org/hc/professionalReg/loc/</code></li> <li><code>http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/</code></li> </ul> |

| Data Element |  |  |  |  |  |  | Occurs<br>Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|              |  |  |  |  |  |  |                  |        | <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/gcp/loc/">http://epcis.tracelink.com/hc/gcp/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_company_id/loc/">http://epcis.tracelink.com/hc/in_company_id/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_location_id/loc/">http://epcis.tracelink.com/hc/in_location_id/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kr_provider_code/loc/">http://epcis.tracelink.com/hc/kr_provider_code/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/">http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cuit/loc/">http://epcis.tracelink.com/hc/cuit/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_iec/loc/">http://epcis.tracelink.com/hc/in_iec/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_pan/loc/">http://epcis.tracelink.com/hc/in_pan/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_tin/loc/">http://epcis.tracelink.com/hc/in_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_account_number/loc/">http://epcis.tracelink.com/hc/ru_account_number/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_indiv/loc/">http://epcis.tracelink.com/hc/ru_inn_indiv/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/">http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_mfr/loc/">http://epcis.tracelink.com/hc/in_mfr/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_mrch/loc/">http://epcis.tracelink.com/hc/in_mrch/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/in_gstn/loc/">http://epcis.tracelink.com/hc/in_gstn/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_foreign_mah/loc/">http://epcis.tracelink.com/hc/cn_foreign_mah/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/">http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/cn_usid/loc/">http://epcis.tracelink.com/hc/cn_usid/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/am_tin/loc/">http://epcis.tracelink.com/hc/am_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/by_tin/loc/">http://epcis.tracelink.com/hc/by_tin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kz_bin/loc/">http://epcis.tracelink.com/hc/kz_bin/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/">http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/kg_tin/loc/">http://epcis.tracelink.com/hc/kg_tin/loc/</a></li> </ul> <p>If the sold from party is the same as the ship from party, the ship from identifier does not need to be sent.</p> |

| Data Element |  |  |  |                 |             |  | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|-----------------|-------------|--|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                 | @type       |  | 1...<br>0/*   | String | <p><b>Conditionally required</b> if <b>source</b> is populated. Captures the type of source party identifier. Valid values:</p> <ul style="list-style-type: none"> <li>Sold from party = <a href="#">urn:epcglobal:cbv:sdt:owning_party</a> – The type of identifier used for the business entity transferring ownership of the goods. Value required if <b>source</b> is present and ship from party is the same as the business entity that owns the goods.</li> <li>Ship from party = <a href="#">urn:epcglobal:cbv:sdt:location</a> – The type of identifier used for the location that ships the goods. Value required if <b>source</b> is present and the ship from party is different from the business entity that owns the goods.</li> <li>Carrier party = <a href="http://epcis.tracelink.com/sdt/carrier_party">http://epcis.tracelink.com/sdt/carrier_party</a> – The type of identifier used for the party that ships the goods.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | destinationList |             |  | 0...1<br>–    | -      | <p>Captures the receiving business or location parties and supports one of two functions:</p> <ul style="list-style-type: none"> <li>If the <b>VocabularyElement</b> is populated with the party address in master data, the <b>destinationList</b> identifies the sold to and ship to parties. The party master data is mapped from <b>VocabularyElement</b>.</li> <li>If the <b>VocabularyElement</b> is not populated with party address from master data, the <b>destinationList</b> party identifiers are used to look up the party address in master data.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |                 | destination |  | 0...<br>0/*   | String | <p>Captures the destination party identifier for the sold to or ship to parties. Party identifier in destination either:</p> <ul style="list-style-type: none"> <li>Identifies the sold from or ship from parties in the <b>VocabularyElement</b>. The party address info is mapped from the <b>VocabularyElement</b>. Nothing is mapped from the <b>VocabularyElement</b> if there is no match between the party identifier in the <b>destinationList</b>   destination and <b>VocabularyElement[@id]</b> elements.</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>The <b>destinationList</b>   destination elements are used to perform a master data lookup if the <b>VocabularyElement</b> is not populated or there is no match between party identifiers in the source and <b>VocabularyElement[@id]</b> elements.</li> </ul> <p>Valid values:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:</a></li> <li><a href="http://epcis.tracelink.com/hc/companyId/loc/">http://epcis.tracelink.com/hc/companyId/loc/</a></li> <li><a href="http://epcis.tracelink.com/hc/companySiteId/loc/">http://epcis.tracelink.com/hc/companySiteId/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/duns/loc/">http://epcis.gs1us.org/hc/duns/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/duns_plus_four/loc/">http://epcis.gs1us.org/hc/duns_plus_four/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/dea/loc/">http://epcis.gs1us.org/hc/dea/loc/</a></li> <li><a href="http://epcis.gs1us.org/hc/hin/loc/">http://epcis.gs1us.org/hc/hin/loc/</a></li> <li><a href="http://epcis.gs1br.org/hc/cpf/loc/">http://epcis.gs1br.org/hc/cpf/loc/</a></li> </ul> |



| Data Element |  |  |  |  |  | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|              |  |  |  |  |  |               |        | <ul style="list-style-type: none"> <li>• <a href="http://epcis.gs1br.org/hc/cnes/loc/">http://epcis.gs1br.org/hc/cnes/loc/</a></li> <li>• <a href="http://epcis.gs1br.org/hc/cnpj/loc/">http://epcis.gs1br.org/hc/cnpj/loc/</a></li> <li>• <a href="http://epcis.gs1br.org/hc/professionalReg/loc/">http://epcis.gs1br.org/hc/professionalReg/loc/</a></li> <li>• <a href="http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/">http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/gcp/loc/">http://epcis.tracelink.com/hc/gcp/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_company_id/loc/">http://epcis.tracelink.com/hc/in_company_id/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_location_id/loc/">http://epcis.tracelink.com/hc/in_location_id/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/kr_provider_code/loc/">http://epcis.tracelink.com/hc/kr_provider_code/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/">http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/cuit/loc/">http://epcis.tracelink.com/hc/cuit/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_iec/loc/">http://epcis.tracelink.com/hc/in_iec/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_pan/loc/">http://epcis.tracelink.com/hc/in_pan/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_tin/loc/">http://epcis.tracelink.com/hc/in_tin/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/ru_account_number/loc/">http://epcis.tracelink.com/hc/ru_account_number/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/ru_inn_indiv/loc/">http://epcis.tracelink.com/hc/ru_inn_indiv/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/">http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/">http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_mfr/loc/">http://epcis.tracelink.com/hc/in_mfr/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_mrch/loc/">http://epcis.tracelink.com/hc/in_mrch/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/in_gstn/loc/">http://epcis.tracelink.com/hc/in_gstn/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/cn_foreign_mah/loc/">http://epcis.tracelink.com/hc/cn_foreign_mah/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/">http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/cn_usid/loc/">http://epcis.tracelink.com/hc/cn_usid/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/am_tin/loc/">http://epcis.tracelink.com/hc/am_tin/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/by_tin/loc/">http://epcis.tracelink.com/hc/by_tin/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/kz_bin/loc/">http://epcis.tracelink.com/hc/kz_bin/loc/</a></li> <li>• <a href="http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/">http://epcis.tracelink.com/hc/id_bpom_facilityid/loc/</a></li> </ul> |

| Data Element |  |  |  |                        |                      | Occurs Length | Format | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|------------------------|----------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                        |                      |               |        | <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/kg_tin/loc/">http://epcis.tracelink.com/hc/kg_tin/loc/</a></li> </ul> <p>If the sold from party is the same as the ship from party, the ship from identifier does not need to be sent.</p>                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |                        | @type                | 1...*<br>0/*  | String | <p><b>Conditionally required</b> if <b>destination</b> is populated. Captures the type of destination party identifier. Valid values:</p> <ul style="list-style-type: none"> <li>Sold to party = <a href="#">urn:epcglobal:cbv:sdt:owning_party</a> – Value required if <b>destination</b> is present and the ship from party is the same as the business entity that receives the goods.</li> <li>Ship from party = <a href="#">urn:epcglobal:cbv:sdt:location</a> – Value required if <b>destination</b> is present and the ship to party is different from the business entity that receives the goods.</li> </ul> |
|              |  |  |  | tl:locationId          |                      | 0...1<br>–    | -      | Specifies identifier of facility/warehouse to scope the void shipping transaction for the delivery at the specified location. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |                        | @type                | 0...1<br>–    | -      | <p><b>Required.</b> Attribute that identifies location types. See the <a href="#">LocationIdType</a> enumeration list for valid values:<sup>2</sup></p> <p>⚠ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul>                                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:voidEventExtensions |                      | 1...1<br>–    | -      | <b>Required.</b> Extensions used for commission <b>ObjectEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |                        | tl:deliveryDirection | 0...1<br>0/*  | String | <p><b>Required.</b> Indicates whether the delivery is sent or received by the Partner. Determines if the message is for voiding a shipment or receipt.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li><a href="#">Sent</a> – The delivery is sent by the Partner.</li> <li><a href="#">Received</a> – The delivery is received by the Partner.</li> </ul>                                                                                                                                                                                                                                            |

<sup>1</sup>777776067344<sup>2</sup>GLN

| Data Element |  |  |  |  |                      | Occurs Length | Format  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|----------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:partnerId         | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>deliveryDirection</b> = <b>received</b> . Partner ID for the delivery document. <sup>1</sup>                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | @type                | 1...1<br>0/*  | String  | <b>Required.</b> Partner identifier type. <sup>2</sup><br><div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                 |
|              |  |  |  |  | tl:transactionDate   | 1...1<br>1/*  | Date    | <b>Required.</b> User-specified date for Serialized Operations Manager Void message in XML date format YYYY-MM-DD. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:orderCancelled    | 0...1<br>0/*  | Boolean | Replaces <b>CorrectShipment</b> . Tracks whether order is cancelled rather than intent to correct, aligning better with future government reporting and ERP functionality. Default value is <b>false</b> . Valid values: <sup>4</sup> <ul style="list-style-type: none"> <li><b>false</b> = Original order voided and may or may not be corrected at a later time.</li> <li><b>true</b> = Original order voided and cancelled. Cannot be corrected.</li> </ul> |
|              |  |  |  |  | tl:changeReasonCode  | 1...1<br>0/*  | String  | <b>Required.</b> Code identifying reason for the void or correction. <sup>5</sup><br>See the <a href="#">ReasonCodes</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | tl:reasonDescription | 0...1<br>0/*  | String  | Text description of reason code. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:tl="http://epcis.tracelink.com/ns" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

<sup>1</sup>8888882028677<sup>2</sup>GLN<sup>3</sup>2016-09-18<sup>4</sup>false<sup>5</sup>Correction<sup>6</sup>Shipment to be corrected

```

xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2016-09-18T22:08:02Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.1</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">88877771013655</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.1</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>2019072522090033</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-07-25T22:10:53Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2019-07-25T22:10:53Z</eventTime>
        <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
        <epcList>
          <epc/>
        </epcList>
        <action>OBSERVE</action>
        <bizStep>urn:epcglobal:cbv:bizstep:void_shipping</bizStep>
        <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
        <readPoint>
          <id>urn:epc:id:sgln:8887777.01384.0</id>
        </readPoint>
        <bizLocation>
          <id>urn:epc:id:sgln:8887777.01384.0</id>
        </bizLocation>
        <bizTransactionList>
          <bizTransaction
type="urn:epcglobal:cbv:btt:desadv">urn:epcglobal:cbv:bt:7777776067344:8047889791</bizTransaction>

```

```

</bizTransactionList>
  <extension>
    <sourceList>
      <source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:088202.867701
    </sourceList>
    <destinationList>
      <destination type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:033333.1
    </destinationList>
  </extension>
<tl:locationId type="GLN">8887771013655</tl:locationId>
<tl:voidEventExtensions>
  <tl:deliveryDirection>Sent</tl:deliveryDirection>
  <tl:partnerId type="GLN">8887771013655</tl:partnerId>
  <tl:transactionDate>2019-07-25</tl:transactionDate>
  <tl:orderCancelled>false</tl:orderCancelled>
  <tl:changeReasonCode>DamagedInTransit</tl:changeReasonCode>
  <tl:reasonDescription>Delivery truck was involved in an accident and product was damaged. New
delivery will be sent.</tl:reasonDescription>
</tl:voidEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element   | Error Message                                                                                 | Description                                                                                             |
|----------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Class 1</b> |                                                                                               |                                                                                                         |
| action         | action OBSERVE is required for ObjectEvent void shipping !!!                                  | The error occurs if the source does not equal <b>OBSERVE</b> .                                          |
| bizStep        | bizStep urn:epcglobal:cbv:bizstep:void_shipping is required for ObjectEvent void shipping !!! | The error occurs if the source does not equal <b>urn:epcglobal:cbv:bizstep:void_shipping</b> .          |
| bizTransaction | Delivery document is required !!!                                                             | The error occurs if the source does not equal <b>urn:epcglobal:cbv:bt:desadv</b> , or is empty or null. |
|                | Unable to parse data. bizTransaction must begin with urn:epcglobal:cbv:bt: !!!                | The error occurs if source does not begin with <b>urn:epcglobal:cbv:bt:.</b>                            |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                 | Description                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| disposition                                                                                                                                                       | Disposition urn:epcglobal:cbv:disp:in_progress is required for ObjectEvent void shipping !!!                                                  | The error occurs if the source does not equal <code>urn:epcglobal:cbv:disp:in_progress</code> .     |
| ObjectEvent                                                                                                                                                       | At least one ObjectEvent for void shipment transaction is required !!!                                                                        | The error occurs if there is not at least one <b>ObjectEvent</b> present.                           |
|                                                                                                                                                                   | Only one ObjectEvent for the void shipping transaction is required !!!                                                                        | The error occurs if more than one source is present.                                                |
| tl:changeReasonCode                                                                                                                                               | Valid reason code is required !!!                                                                                                             | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| tl:locationId   @type                                                                                                                                             | Valid location identifier type is required !!!                                                                                                | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| tl:partnerId   @type                                                                                                                                              | Party type attribute is required when source partner Id is populated !!!                                                                      | The error occurs if <b>tl:partnerId</b> is populated, but the source is empty or null.              |
|                                                                                                                                                                   | Valid partner identifier type is required !!!                                                                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| Class 2                                                                                                                                                           |                                                                                                                                               |                                                                                                     |
| cmn:DeliveryNumber                                                                                                                                                | Delivery [Delivery Number]: Shipment transaction for specified delivery number must be a sales shipment. Transfer shipment may not be voided. | The error occurs if source refers to a transfer shipment.                                           |
|                                                                                                                                                                   | Delivery [Delivery Number]: Shipment transaction for specified delivery number has not been submitted.                                        | The error occurs if source refers to a shipment that is not in a submitted state.                   |
|                                                                                                                                                                   | Delivery [Delivery Number]: The serial numbers for the specified deliver must be in a Commissioned - Shipped state.                           | The error occurs if the serial numbers are not in a Commissioned - Shipped state.                   |
| Class 3                                                                                                                                                           |                                                                                                                                               |                                                                                                     |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                               |                                                                                                     |

## Void Shipment (SOAP)

### Void Shipment Request

## Guidelines

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

The following data is sent in the request to TraceLink:

| Data Element     |  |                  |            |                 | Occurs<br>Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------|--|------------------|------------|-----------------|------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| soapenv:Envelope |  |                  |            |                 | 1...1<br>-       | -      | <b>Required.</b> SOAP Envelope root element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| soapenv:Header   |  |                  |            |                 | 1...1<br>-       | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| soapenv:Body     |  |                  |            |                 | 1...1<br>-       | -      | <b>Required.</b> SOAP Message Body.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                  |  | urn:VoidShipment |            |                 | 1...1<br>-       | -      | <p><b>Required.</b> Create void shipment request message. Communicates the location, delivery number, order cancel status, transaction date, and reason of a void shipment message. The system validates the delivery in order to ensure that it is a valid shipment and that the serial numbers are in a Shipped status.</p> <p>The Order Cancel status determines whether the delivery is voided and canceled such that the delivery may not be corrected or whether the delivery is voided and not corrected such that the delivery may be updated at a later time.</p> |
|                  |  |                  | LocationId |                 | 0...1<br>-       | -      | Optional location associated with the original delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                  |  |                  |            | @identiervalue  | 1...1<br>0/*     | String | Specifies identifier of facility/warehouse to scope the void shipment. This is intended to provide access control for the void message. When the transaction is updated, the location of the original delivery will be used to return the serial numbers to an available state. <sup>1</sup>                                                                                                                                                                                                                                                                               |
|                  |  |                  |            | @identifiertype | 1...1<br>1/1     | String | <p><b>Required.</b> Location identifier type.<sup>2</sup></p> <p>See the <a href="#">LocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>8888882028677

<sup>2</sup>GLN

| Data Element |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|-----------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | DeliveryNumber        | 1...1<br>1/*  | String | <b>Required.</b> Delivery number that refers to a previously submitted delivery (Serialized Operations Manager Sales Shipment). The system will validate that: <sup>1</sup> <ul style="list-style-type: none"> <li>This original delivery is a sales shipment and not a transfer order.</li> <li>The original delivery is in a submitted state.</li> <li>The serial numbers for the original delivery are in a shipped status.</li> </ul> |
|              |  |  | DeliveryDirection     | 1...1<br>1/*  | String | <b>Required.</b> Indicates whether the delivery is sent or received by the Partner which determines if the message is for voiding shipment or receipt. Valid values: <ul style="list-style-type: none"> <li><a href="#">Sent</a></li> <li><a href="#">Received</a></li> </ul>                                                                                                                                                             |
|              |  |  | PartnerId             | 0...1<br>-    | -      | Optional Partner ID associated with the original delivery.                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | SenderInfo            | 0...1<br>-    | -      | <b>Conditionally required</b> if the same <b>DeliveryNumber</b> is used for multiple shipments. Captures information about the business entity and location that is sending the shipment.                                                                                                                                                                                                                                                 |
|              |  |  | FromBusinessPartyInfo | 0...1<br>-    | -      | Captures the identifiers associated with the business entity that is sending the shipment.                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | BusinessId            | 0...*<br>-    | -      | Captures the identifiers associated with the business entity that is sending the shipment.                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | @type                 | 1...1<br>1/*  | String | <b>Conditionally required</b> if the same <b>BusinessId</b> is present. Captures the sold from business identifier value. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                |
|              |  |  | ShipFromLocationInfo  | 0...1<br>-    | -      | Captures the identifiers associated with the location that is sending the shipment.                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | FacilityId            | 0...*<br>-    | -      | Indicates the identifiers associated with the business location that is sending the shipment.                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | @type                 | 1...1<br>1/*  | String | <b>Conditionally required</b> if the <b>FacilityId</b> is present. Indicates the ship from location identifier value. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                    |
|              |  |  | TransactionDate       | 1...1<br>1/*  | Date   | Date of void transaction in partner's business system. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>D12345<sup>2</sup>2015-06-01



| Data Element |  |  |                | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|----------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | OrderCancelled | 1...1<br>1/*  | Boolean | <b>Required.</b> Represents the status of the order/delivery in the ERP system. <sup>1</sup> <ul style="list-style-type: none"> <li>If the order/delivery is canceled ( <b>true</b> ), the original order is voided and canceled. Cannot be corrected.</li> <li>If the order/delivery is not canceled ( <b>false</b> ), the original order is voided and can be corrected a later time.</li> </ul> |
|              |  |  | ReasonCode     | 1...1<br>1/*  | String  | <b>Required.</b> Code identifying reason for the void or correction. <sup>2</sup><br>See the <a href="#">ReasonCodes</a> enumeration list for valid values.                                                                                                                                                                                                                                        |
|              |  |  | ReasonText     | 0...1<br>0/*  | String  | Text description of reason code. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                      |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Body>
    <urn:VoidShipment>
      <VoidShipmentRequest>
        <LocationId identiifiertype="GLN" identiifiervalue="8888882028655"/>
        <DeliveryNumber>D12345</DeliveryNumber>
        <DeliveryDirection>Sent</DeliveryDirection>
        <SenderInfo>
          <FromBusinessPartyInfo>
            <BusinessId type="GLN">6368866569756</BusinessId>
          </FromBusinessPartyInfo>
          <ShipFromLocationInfo>
            <FacilityId type="GLN">6368866569163</FacilityId>
          </ShipFromLocationInfo>
        </SenderInfo>
        <TransactionDate>2015-06-01</TransactionDate>
        <OrderCancelled>true</OrderCancelled>
        <ReasonCode>ORDER_CANCELLED</ReasonCode>
      </VoidShipmentRequest>
    </urn:VoidShipment>
  </soapenv:Body>
</soapenv:Envelope>
```

<sup>1</sup>true

<sup>2</sup>ORDER\_CANCELLED

<sup>3</sup>Customer cancelled order.

```

        <ReasonText>Order cancelled by customer.</ReasonText>
    </VoidShipmentRequest>
</urn:VoidShipment>
</soapenv:Body>
</soapenv:Envelope>

```

## Errors

| Exception Code                       | Exception Message                                                                                                                                                                                                                                                  |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DELIVERY_NUMBER_MISSING              | Delivery number must be specified for Void Shipment transaction.                                                                                                                                                                                                   |
| INVALID_ORDER_CANCELED_STATUS        | Delivery [Delivery Number]: The Order Cancelled field must be true or false.                                                                                                                                                                                       |
| INVALID_REASON_CODE                  | Delivery [Delivery Number]: A valid void reason [Reason] must be specified.                                                                                                                                                                                        |
| INVALID_SERIAL_NUMBER_STATUS         | Delivery [Delivery Number]: The serial numbers for the specified deliver must be in a Commissioned - Shipped state.                                                                                                                                                |
| INVALID_SHIPMENT_STATUS              | Delivery [Delivery Number]: Shipment transaction for specified delivery number has not been submitted.                                                                                                                                                             |
| NO_SHIPMENT_FOUND_FOR_COMPANY        | Delivery [Delivery Number]: No shipment found for specified delivery number in specified company [CompanyID].                                                                                                                                                      |
| NO_SHIPMENT_FOUND_FOR_LOCATION       | Delivery [Delivery Number]: No shipment found for specified delivery number in specified location [LocationID].                                                                                                                                                    |
| REASON_CODE_MISSING                  | Delivery [Delivery Number]: A void reason must be specified.                                                                                                                                                                                                       |
| INVALID_RECEIPT_STATUS               | Delivery [Delivery Number]: Receipt transaction for specified delivery number is not present in the system.                                                                                                                                                        |
| INVALID_SERIAL_NUMBER_STATUS_RECEIPT | Delivery [Delivery Number]: The serial numbers for the specified delivery must be in a Commissioned - Available or Commissioned - Pending Receipt state when Delivery Direction is Received.                                                                       |
| DELIVERY_NUMBER_DUPLICATE            | Operation could not be performed because multiple deliveries with the delivery number [DELIVERY NUMBER] were found in the system. Please provide additional details (SoldFromParty and ShipFromLocation) to fetch the intended delivery and perform the operation. |
| NO_RECEIPT_FOUND_FOR_LOCATION        | Delivery [Delivery Number]: No receipt found for specified delivery number in specified location [LocationID].                                                                                                                                                     |
| NO_RECEIPT_FOUND_FOR_COMPANY         | Delivery [Delivery Number]: No receipt found for specified delivery number in specified company [CompanyID].                                                                                                                                                       |
| INVALID_DIRECTION_DIRECTION          | Delivery [Delivery Number]: A Delivery Direction must be specified.                                                                                                                                                                                                |

## Void Shipment Response

## Guidelines

The following data is included in the message response:

| Data Element |        |                          |            |                 |                  | Occurs Length | Type   | Description                                                                                 |
|--------------|--------|--------------------------|------------|-----------------|------------------|---------------|--------|---------------------------------------------------------------------------------------------|
| S:Envelope   |        |                          |            |                 |                  | 1...1<br>-    | -      | <b>Required.</b> SOAP Envelope root element.                                                |
|              | S:Body |                          |            |                 |                  | 1...1<br>-    | -      | <b>Required.</b> SOAP Message Body.                                                         |
|              |        | ns2:VoidShipmentResponse |            |                 |                  | 1...1<br>-    | -      | <b>Required.</b> Void Shipment Response Message.                                            |
|              |        |                          | TLResponse |                 |                  | 1...1<br>-    | -      | <b>Required.</b> Response.                                                                  |
|              |        |                          |            | Success         |                  | 0...1<br>-    | -      | Indicates if Void Shipment processing succeeds. <sup>1</sup>                                |
|              |        |                          |            | ExceptionReturn |                  | 0...1<br>-    | -      | Populated with error information only if <b>Success</b> = <b>false</b> , otherwise omitted. |
|              |        |                          |            |                 | CallException    | 1...*<br>-    | -      | <b>Required.</b> Contains error details.                                                    |
|              |        |                          |            |                 | ExceptionCode    | 0...1<br>0/*  | String | <b>Required.</b> Error code.                                                                |
|              |        |                          |            |                 | ExceptionMessage | 0...1<br>0/*  | String | Message that further describes error condition.                                             |

## Example (Success)

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:VoidShipmentResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
```

<sup>1</sup>true

```

    <TLResponse>
      <Success>true</Success>
    </TLResponse>
  </ns2:VoidShipmentResponse>
</S:Body>
</S:Envelope>

```

## Example (Error)

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:VoidShipmentResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>false</Success>
        <ExceptionReturn>
          <CallException>
            <ExceptionCode>INVALIDDELIVERYNUMBER</ExceptionCode>
            <ExceptionMessage>Invalid delivery number. Delivery number not found.</ExceptionMessage>
          </CallException>
        </ExceptionReturn>
      </TLResponse>
    </ns2:VoidShipmentResponse>
  </S:Body>
</S:Envelope>

```



# Customs clearance





# Customs clearance APIs

## Why do I use these messages?

Use these messages to record that a customs agency has approved items for import to Russia and provide supporting documentation.

## Which report do these messages generate?

These messages generate the [335 - FTS Data](#) report in the Russia Compliance application if their contents meet the report conditions.

## Country Clearance (XML)

### Guidelines

**Message Type:** SOM\_COUNTRY\_CLEARANCE

**Info Exchange Display Name:** Country Clearance

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element                   |                       |                      | Occurs Length | Type   | Description                                                                |
|--------------------------------|-----------------------|----------------------|---------------|--------|----------------------------------------------------------------------------|
| som:SOMCountryClearanceMessage |                       |                      | 1...1<br>-    | -      | <b>Required.</b> Transaction root element.                                 |
|                                | som:ControlFileHeader |                      | 1...1<br>-    | -      | <b>Required.</b> The message document's header information.                |
|                                |                       | cmn:FileSenderNumber | 1...1<br>1/20 | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup> |

<sup>1</sup>8888882028655

| Data Element |  |                         | Occurs Length | Type     | Description                                                                                                                                                                                                                                         |
|--------------|--|-------------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:FileReceiverNumber  | 1...1<br>1/20 | String   | <b>Required.</b> The company identifier of the file's recipient. <sup>1</sup>                                                                                                                                                                       |
|              |  | cmn:FileControlNumber   | 1...1<br>1/*  | String   | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>2</sup>                                                                                                                  |
|              |  | cmn:FileDate            | 1...1<br>1/*  | Date     | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>3</sup>                                                                                                                                |
|              |  | cmn:FileTime            | 1...1<br>1/*  | Time     | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>4</sup>          |
|              |  | som:MessageBody         | 1...1<br>-    | -        | <b>Required.</b> Country Clearance message details.                                                                                                                                                                                                 |
|              |  | cmn:EventDateTime       | 1...1<br>0/*  | DateTime | <b>Required.</b> Timestamp of date and time of the product release with the UTC time zone indicator in XML YYYY-MM-DDTHH:MM:SS.nnZ format.                                                                                                          |
|              |  | cmn:EventTimeZoneOffset | 0...1<br>6/6  | String   | Event time zone offset. Default value is +00:00 if the source is not populated.                                                                                                                                                                     |
|              |  | cmn:ClearanceType       | 1...1<br>0/*  | String   | <b>Required.</b> Identifies the clearance type. <sup>5</sup><br>See the <a href="#">ClearanceType</a> enumeration list for valid values.                                                                                                            |
|              |  | cmn:ImportFromCountry   | 1...1<br>1/*  | String   | <b>Required.</b> Country the product is being imported from using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>6</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  | cmn:ImportToCountry     | 1...1<br>1/*  | String   | <b>Required.</b> Country the product is being imported into using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>7</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  | cmn:RegistrationDate    | 0...1         | Date     | <b>Conditionally required</b> if <b>cmn:ClearanceType = CUSTOMS</b> . Registration date in YYYY-MM-DD XML date format. <sup>8</sup>                                                                                                                 |

<sup>1</sup>8888882028677<sup>2</sup>20190821063132<sup>3</sup>2019-08-21<sup>4</sup>06:31:32Z<sup>5</sup>CUSTOMS<sup>6</sup>FR<sup>7</sup>RU<sup>8</sup>2019-05-14



| Data Element |  |                              |           |                |            | Occurs Length | Type   | Description                                                                                                                                                                                                                         |
|--------------|--|------------------------------|-----------|----------------|------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                              |           |                |            |               |        |                                                                                                                                                                                                                                     |
|              |  | cmn:CustomsAuthorityCode     |           |                |            | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:ClearanceType</b> = <b>CUSTOMS</b> . Customs authority code. <sup>1</sup>                                                                                                                   |
|              |  | cmn:DeclarationReleaseNumber |           |                |            | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:ClearanceType</b> = <b>CUSTOMS</b> . Declaration release number for product. <sup>2</sup>                                                                                                   |
|              |  | cmn:ActionCode               |           |                |            | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:ClearanceType</b> = <b>CUSTOMS</b> . Action code. <sup>3</sup><br>See the <a href="#">ActionCode</a> enumeration list for valid values.                                                     |
|              |  | cmn:EventLocation            |           |                |            | 0...1<br>0/*  | String | <b>Required.</b> Business or location identifier for the entity that is importing the products.                                                                                                                                     |
|              |  | cmn:EventLocationType        |           |                |            | 0...1<br>0/*  | String | <b>Required.</b> Business or location identifier type for the entity that is importing the products.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                            |
|              |  | cmn:ImportingPartyId         |           |                |            | 1...1<br>1/*  | String | <b>Required.</b> Importing party identifier. <sup>4</sup>                                                                                                                                                                           |
|              |  |                              | @type     |                |            | 1...1<br>-    | String | <b>Required.</b> Importing party identifier type. <sup>5</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                  |
|              |  | cmn:ItemList                 |           |                |            | 0...1<br>-    | -      | <b>Conditionally required</b> if both <b>cmn:HomogeneousContainersList</b> and <b>cmn:HeterogeneousContainersList</b> are not populated. List of items. Each item is a single product of loose items (e.g. sampled serial numbers). |
|              |  |                              | cmn:Items |                |            | 1...<br>*     | -      | <b>Required.</b> Products that are being imported. One item will be present for each unique product.                                                                                                                                |
|              |  |                              |           | cmn:NumberList |            | 1...1<br>-    | -      | <b>Required.</b> Contains the list of serial numbers of eaches.                                                                                                                                                                     |
|              |  |                              |           |                | cmn:Serial | 1...<br>*     | String | <b>Required.</b> The serial number being imported. Serial number is expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(01) (21) formatted serial number for GTINs. <sup>6</sup>             |

<sup>1</sup>201960876<sup>2</sup>198765<sup>3</sup>DOMESTIC<sup>4</sup>0333331013655<sup>5</sup>GLN<sup>6</sup>015088202501033321100000060001

| Data Element |  |  |  |                               | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|-------------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:CustomsValue              | 0...1<br>-    | Decimal | <b>Conditionally required</b> if cmn:ClearanceType = <b>CUSTOMS</b> . Per unit customs cost for each order item in order item list. <sup>1</sup>                                                                                                                                             |
|              |  |  |  | @currencyCode                 | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>2</sup>                                                                                                                                                                                                                  |
|              |  |  |  | cmn:TransactionIdentifier     | 0...*<br>0/*  | String  | The transaction identifier associated with the country clearance. <sup>3</sup>                                                                                                                                                                                                               |
|              |  |  |  | @type                         | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>4</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.                                                                                                                                          |
|              |  |  |  | @date                         | 1...1<br>-    | Date    | <b>Required.</b> Transaction date attribute in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                                               |
|              |  |  |  | cmn:HomogeneousContainersList | 0...1<br>-    | -       | <b>Conditionally required</b> if both cmn:HomogeneousContainersList and cmn:HeterogeneousContainersList are not populated. List of homogeneous containers. Each container represents one or more batches of the same product.                                                                |
|              |  |  |  | cmn:HomogeneousContainer      | 1...*<br>-    | -       | <b>Required.</b> Cases or pallets containing the same product.                                                                                                                                                                                                                               |
|              |  |  |  | cmn:NumberList                | 1...1<br>-    | -       | <b>Required.</b> Contains the list of serial numbers of eaches.                                                                                                                                                                                                                              |
|              |  |  |  | cmn:Serial                    | 1...*<br>1/*  | String  | <b>Required.</b> Contains the serial number or numbers that are being imported. Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI(01)(21) formatted serial number for GTINs. <sup>6</sup>                                             |
|              |  |  |  | cmn:CustomsValue              | 0...1<br>0/*  | Decimal | <b>Conditionally required</b> if cmn:ClearanceType = <b>CUSTOMS</b> . Per unit customs cost for each order item in order item list. <sup>7</sup><br> <b>Mandatory</b> if cmn:ClearanceType = "CUSTOMS". |

<sup>1</sup>1976.00<sup>2</sup>RUB<sup>3</sup>9876987321<sup>4</sup>CERTIFICATECONFORMITY<sup>5</sup>2019-05-12<sup>6</sup>015088202501033321100000060010<sup>7</sup>1976.00

| Data Element |  |                                 |                            |                           |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                      |
|--------------|--|---------------------------------|----------------------------|---------------------------|-----------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                                 |                            |                           | @currencyCode         | 1...1<br>3/3  | String | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>1</sup>                                                                                                                                                                      |
|              |  |                                 |                            | cmn:TransactionIdentifier |                       | 0...*<br>0/*  | String | The transaction identifier associated with the country clearance. <sup>2</sup>                                                                                                                                                                   |
|              |  |                                 |                            |                           | @type                 | 1...1<br>1/*  | String | <b>Required.</b> The transaction identifier type. <sup>3</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.                                                                                              |
|              |  |                                 |                            |                           | @date                 | 1...1<br>-    | Date   | <b>Required.</b> Transaction date attribute. <sup>4</sup>                                                                                                                                                                                        |
|              |  | cmn:HeterogeneousContainersList |                            |                           |                       | 0...1<br>-    | -      | <b>Conditionally required</b> if both <b>cmn:ItemList</b> and <b>cmn:HomogeneousContainersList</b> are not populated. List of heterogeneous containers. Each container is a case or pallet with different products inside.                       |
|              |  |                                 | cmn:HeterogeneousContainer |                           |                       | 1...*<br>-    | -      | <b>Required.</b> Case or pallet containing a mix of different products.                                                                                                                                                                          |
|              |  |                                 |                            | cmn:Serial                |                       | 1...1<br>1/*  | String | <b>Required.</b> Contains the serial number or numbers that are being imported. Serial number expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(01)(21) formatted serial number for GTINs. <sup>5</sup> |
|              |  |                                 |                            | cmn:ContainerContents     |                       | 1...*<br>-    | -      | <b>Required.</b> Contents of heterogeneous containers.                                                                                                                                                                                           |
|              |  |                                 |                            |                           | cmn:PackagingItemCode | 1...1<br>1/*  | String | <b>Required.</b> The packaging level item code (e.g. GTIN-14, CN-ResCode) associated with the serialized items that are being imported. <sup>6</sup>                                                                                             |
|              |  |                                 |                            |                           | @type                 | 1...1<br>1/*  | String | <b>Required.</b> The product code type for the packaging item code. <sup>7</sup><br>See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                          |
|              |  |                                 |                            |                           | cmn:LotNumber         | 1...1<br>1/*  | String | <b>Required.</b> The lot number associated with the specified serial numbers used to identify the serial numbers that are being updated. <sup>8</sup>                                                                                            |

<sup>1</sup>RUB<sup>2</sup>9876987324<sup>3</sup>CERTIFICATECONFORMITY<sup>4</sup>2019-05-12<sup>5</sup>01508820250103321100000060021<sup>6</sup>00882025030223<sup>7</sup>GTIN-14<sup>8</sup>ABC123

| Data Element |  |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                         |
|--------------|--|--|--|--|---------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:CustomsValue          | 0...1<br>0/*  | Decimal | <b>Conditionally required</b> if cmn:ClearanceType = <b>CUSTOMS</b> . Per unit customs cost for each order item in order item list. <sup>1</sup>    |
|              |  |  |  |  | @currencyCode             | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>2</sup>                                                                         |
|              |  |  |  |  | cmn:TransactionIdentifier | 0...*<br>0/*  | String  | The transaction identifier(s) associated with the country clearance, if available. <sup>3</sup>                                                     |
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>4</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values. |
|              |  |  |  |  | @date                     | 1...1<br>-    | Date    | <b>Required.</b> Transaction date attribute. <sup>5</sup>                                                                                           |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMCountryClearanceMessage xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028644</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>20130821065245</cmn:FileControlNumber>
    <cmn:FileDate>19-09-20</cmn:FileDate>
    <cmn:FileTime>06:52:45.02</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <cmn:EventDateTime>2019-09-20T06:30:32.12</cmn:EventDateTime>
    <cmn:EventTimeZoneOffset>+04:02</cmn:EventTimeZoneOffset>
    <cmn:ClearanceType>CUSTOMS</cmn:ClearanceType>
    <cmn:ImportFromCountry>FR</cmn:ImportFromCountry>
    <cmn:ImportToCountry>RU</cmn:ImportToCountry>
  </som:MessageBody>
</som:SOMCountryClearanceMessage>
```

<sup>1</sup>1976.00<sup>2</sup>RUB<sup>3</sup>9876987327<sup>4</sup>CERTIFICATECONFORMITY<sup>5</sup>2019-05-12

```

<cmn:RegistrationDate>2019-09-20</cmn:RegistrationDate>
<cmn:CustomsAuthorityCode>201960876</cmn:CustomsAuthorityCode>
<cmn:DeclarationReleaseNumber>198765</cmn:DeclarationReleaseNumber>
<cmn:ActionCode>REEXPORT</cmn:ActionCode>
<cmn:EventLocation>0333331013655</cmn:EventLocation>
<cmn:EventLocationType>GCP</cmn:EventLocationType>
<cmn:ImportingPartyId type="GLN">0333331013655</cmn:ImportingPartyId>
<cmn:ItemList>
  <cmn:Items>
    <cmn:NumberList>
      <cmn:Serial>015088202501033321100000060001</cmn:Serial>
      <cmn:Serial>015088202501033321100000060002</cmn:Serial>
      <cmn:Serial>015088202501033321100000060003</cmn:Serial>
      <cmn:Serial>015088202501033321100000060004</cmn:Serial>
      <cmn:Serial>015088202501033321100000060005</cmn:Serial>
      <cmn:Serial>015088202501033321100000060006</cmn:Serial>
      <cmn:Serial>015088202501033321100000060007</cmn:Serial>
      <cmn:Serial>015088202501033321100000060008</cmn:Serial>
      <cmn:Serial>015088202501033321100000060009</cmn:Serial>
    </cmn:NumberList>
    <cmn:CustomsValue currencyCode="RUB">1976.00</cmn:CustomsValue>
    <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-01">9876987321</cmn:TransactionIdentifier>
    <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-10-04">7777222</cmn:TransactionIdentifier>
  </cmn:Items>
  <cmn:Items>
    <cmn:NumberList>
      <cmn:Serial>015088202501033321100000060011</cmn:Serial>
      <cmn:Serial>015088202501033321100000060012</cmn:Serial>
      <cmn:Serial>015088202501033321100000060013</cmn:Serial>
      <cmn:Serial>015088202501033321100000060014</cmn:Serial>
      <cmn:Serial>015088202501033321100000060015</cmn:Serial>
      <cmn:Serial>015088202501033321100000060016</cmn:Serial>
      <cmn:Serial>015088202501033321100000060017</cmn:Serial>
      <cmn:Serial>015088202501033321100000060018</cmn:Serial>
      <cmn:Serial>015088202501033321100000060019</cmn:Serial>
    </cmn:NumberList>
    <cmn:CustomsValue currencyCode="RUX">1976.00</cmn:CustomsValue>
    <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-

```

```

20">9876987321</cmn:TransactionIdentifier>
    <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-10-
21">7777222</cmn:TransactionIdentifier>
    </cmn:Items>
    <cmn:Items>
        <cmn:NumberList>
            <cmn:Serial>015088202501033321100000060021</cmn:Serial>
            <cmn:Serial>015088202501033321100000060022</cmn:Serial>
        </cmn:NumberList>
        <cmn:CustomsValue currencyCode="USD">2000.00</cmn:CustomsValue>
        <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-01-
11">9876982222</cmn:TransactionIdentifier>
        </cmn:Items>
    </cmn:ItemList>
    <cmn:HomogeneousContainersList>
        <cmn:HomogeneousContainer>
            <cmn:NumberList>
                <cmn:Serial>015088202501033321100000060010</cmn:Serial>
                <cmn:Serial>015088202501033321100000060012</cmn:Serial>
                <cmn:Serial>015088202501033321100000060013</cmn:Serial>
                <cmn:Serial>015088202501033321100000060014</cmn:Serial>
                <cmn:Serial>015088202501033321100000060015</cmn:Serial>
                <cmn:Serial>015088202501033321100000060016</cmn:Serial>
                <cmn:Serial>015088202501033321100000060017</cmn:Serial>
                <cmn:Serial>015088202501033321100000060018</cmn:Serial>
                <cmn:Serial>015088202501033321100000060019</cmn:Serial>
            </cmn:NumberList>
            <cmn:CustomsValue currencyCode="RUB">1976.00</cmn:CustomsValue>
            <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-
20">9876987322</cmn:TransactionIdentifier>
            <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-11-
11">774784</cmn:TransactionIdentifier>
            </cmn:HomogeneousContainer>
        <cmn:HomogeneousContainer>
            <cmn:NumberList>
                <cmn:Serial>015088202501033321100000060030</cmn:Serial>
                <cmn:Serial>015088202501033321100000060032</cmn:Serial>
                <cmn:Serial>015088202501033321100000060033</cmn:Serial>
            </cmn:NumberList>
            <cmn:CustomsValue currencyCode="RUB">111</cmn:CustomsValue>

```

```

    <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-
20">9876987322</cmn:TransactionIdentifier>
  </cmn:HomogeneousContainer>
  <cmn:HomogeneousContainer>
    <cmn:NumberList>
      <cmn:Serial>015088202501033321100000060040</cmn:Serial>
      <cmn:Serial>015088202501033321100000060042</cmn:Serial>
      <cmn:Serial>015088202501033321100000060043</cmn:Serial>
      <cmn:Serial>015088202501033321100000060044</cmn:Serial>
    </cmn:NumberList>
    <cmn:CustomsValue currencyCode="USD">5500.76</cmn:CustomsValue>
    <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-11-
11">774784</cmn:TransactionIdentifier>
    <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-
20">7322</cmn:TransactionIdentifier>
    </cmn:HomogeneousContainer>
  </cmn:HomogeneousContainersList>
  <cmn:HeterogeneousContainersList>
    <cmn:HeterogeneousContainer>
      <cmn:Serial>015088202501033321100000060020</cmn:Serial>
      <cmn:ContainerContents>
        <cmn:PackagingItemCode type="GTIN-14">00882025030223</cmn:PackagingItemCode>
        <cmn:LotNumber>ABC123</cmn:LotNumber>
        <cmn:CustomsValue currencyCode="RUB">1976.00</cmn:CustomsValue>
        <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-
20">9876987323</cmn:TransactionIdentifier>
        <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-12-
12">121211</cmn:TransactionIdentifier>
      </cmn:ContainerContents>
    </cmn:HeterogeneousContainer>
    <cmn:ContainerContents>
      <cmn:PackagingItemCode type="CN-RESCODE">999999999</cmn:PackagingItemCode>
      <cmn:LotNumber>HKHYT45792</cmn:LotNumber>
      <cmn:CustomsValue currencyCode="RUB">777</cmn:CustomsValue>
      <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-
20">444987323</cmn:TransactionIdentifier>
      <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-12-
12">121211</cmn:TransactionIdentifier>
    </cmn:ContainerContents>
  </cmn:HeterogeneousContainer>
</cmn:HeterogeneousContainer>

```

```

    <cmn:Serial>015088202501033321100000060021</cmn:Serial>
    <cmn:ContainerContents>
      <cmn:PackagingItemCode type="GTIN-14">00882025030223</cmn:PackagingItemCode>
      <cmn:LotNumber>ABC123</cmn:LotNumber>
      <cmn:CustomsValue currencyCode="USD">1976.00</cmn:CustomsValue>
      <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-
20">9876987323</cmn:TransactionIdentifier>
    </cmn:ContainerContents>
  </cmn:HeterogeneousContainer>
  <cmn:HeterogeneousContainer>
    <cmn:Serial>015088202501033321100000060022</cmn:Serial>
    <cmn:ContainerContents>
      <cmn:PackagingItemCode type="GTIN-14">00882025030223</cmn:PackagingItemCode>
      <cmn:LotNumber>ABC123</cmn:LotNumber>
      <cmn:CustomsValue currencyCode="USD">1976.00</cmn:CustomsValue>
      <cmn:TransactionIdentifier type="DECLARATIONCONFORMITY" date="2019-09-
20">9777</cmn:TransactionIdentifier>
    </cmn:ContainerContents>
  </cmn:HeterogeneousContainer>
  <cmn:HeterogeneousContainer>
    <cmn:Serial>015088202501033321100000060023</cmn:Serial>
    <cmn:ContainerContents>
      <cmn:PackagingItemCode type="GTIN-14">00882025030223</cmn:PackagingItemCode>
      <cmn:LotNumber>ABC123</cmn:LotNumber>
      <cmn:CustomsValue currencyCode="RUZ">4444</cmn:CustomsValue>
      <cmn:TransactionIdentifier type="CERTIFICATECONFORMITY" date="2019-09-
20">9876987323</cmn:TransactionIdentifier>
    </cmn:ContainerContents>
  </cmn:HeterogeneousContainer>
</cmn:HeterogeneousContainersList>
</som:MessageBody>
</som:SOMCountryClearanceMessage>

```

## Errors

| Data Element | Error Message | Description |
|--------------|---------------|-------------|
| Class 1      |               |             |



| Data Element                                  | Error Message                                                                                            | Description                                                                                                                                           |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| cmn:ClearanceType                             | Valid clearance type code is required !!!                                                                | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                   |
| cmn:ImportFromCountry                         | Valid import from country is required !!!                                                                | The error occurs if the source is greater than 2 characters, or is empty or null.                                                                     |
| cmn:ImportToCountry                           | Valid import to country is required !!!                                                                  | The error occurs if the source is greater than 2 characters, or is empty or null.                                                                     |
| cmn:RegistrationDate                          | Registration date is required !!!                                                                        | The error occurs if cmn:ClearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| cmn:CustomsAuthorityCode                      | Customs authority code is required !!!                                                                   | The error occurs if cmn:ClearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| cmn:DeclarationReleaseNumber                  | Declaration release number is required !!!                                                               | The error occurs if cmn:ClearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| cmn:ActionCode                                | Valid action code is required !!!                                                                        | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                   |
| cmn:EventLocation                             | Event location in the country clearance event is required !!!                                            | The error occurs if the source is empty or null.                                                                                                      |
| cmn:EventLocationType                         | Valid event location type is required !!!                                                                | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                   |
| cmn:ImportingPartyId                          | Importing party identifier is required !!!                                                               | The error occurs if the source is empty or null.                                                                                                      |
| cmn:ImportingPartyId   @type                  | Valid importing party identifier type is required !!!                                                    | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                   |
| cmn:ItemList                                  | At least one of Item List, Homogeneous Containers List, or Heterogeneous Containers List is required !!! | The error occurs if cmn:ItemList, cmn:HomogeneousContainersList, and cmn:HeterogeneousContainersList are all empty or null.                           |
| cmn:Items   cmn:NumberList   cmn:Serial       | Serial number is required if itemList is present !!!                                                     | The error occurs if the source is empty or null.                                                                                                      |
| cmn:Items   cmn:CustomsValue                  | Customs value is required !!!                                                                            | The error occurs if cmn:ClearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| cmn:Items   cmn:CustomsValue   @currencyCode  | Valid currency code for customs value is required !!!                                                    | The error occurs if the source is less than 3 characters, or is empty or null.                                                                        |
| cmn:Items   cmn:TransactionIdentifier   @type | Valid transaction identifier type is required !!!                                                        | The error occurs if cmn:TransactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |

| Data Element                                                                                  | Error Message                                                                                            | Description                                                                                                                                           |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| cmn:Items   cmn:TransactionIdentifier   <b>@date</b>                                          | Transaction date is required !!!                                                                         | The error occurs if the source is empty or null.                                                                                                      |
| cmn:HomogeneousContainersList                                                                 | At least one of Item List, Homogeneous Containers List, or Heterogeneous Containers List is required !!! | The error occurs if cmn:ItemList, cmn:HomogeneousContainersList, and cmn:HeterogeneousContainersList are all empty or null.                           |
| cmn:HomogeneousContainer   cmn:NumberList   <b>cmn:Serial</b>                                 | Serial number is required if homogeneousContainersList is present !!!                                    | The error occurs if the source is empty or null.                                                                                                      |
| cmn:HomogeneousContainer   <b>cmn:CustomsValue</b>                                            | Customs value is required !!!                                                                            | The error occurs if cmn:ClearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| cmn:HomogeneousContainer   cmn:CustomsValue   <b>@currencyCode</b>                            | Valid currency code for customs value is required !!!                                                    | The error occurs if the source is less than 3 characters, or is empty or null.                                                                        |
| cmn:HomogeneousContainer   cmn:TransactionIdentifier   <b>@type</b>                           | Valid transaction identifier type is required !!!                                                        | The error occurs if cmn:TransactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |
| cmn:HomogeneousContainer   cmn:TransactionIdentifier   <b>@date</b>                           | Transaction date is required !!!                                                                         | The error occurs if the source is empty or null.                                                                                                      |
| cmn:HeterogeneousContainersList                                                               | At least one of Item List, Homogeneous Containers List, or Heterogeneous Containers List is required !!! | The error occurs if cmn:ItemList, cmn:HomogeneousContainersList, and cmn:HeterogeneousContainersList are all empty or null.                           |
| cmn:HeterogeneousContainer   <b>cmn:Serial</b>                                                | Serial number is required if heterogeneousContainersList is present !!!                                  | The error occurs if the source is empty or null.                                                                                                      |
| cmn:HeterogeneousContainer   cmn:ContainerContents   <b>cmn:PackagingItemCode</b>             | Packaging item code is required !!!                                                                      | The error occurs if the source is empty or null.                                                                                                      |
| cmn:HeterogeneousContainer   cmn:ContainerContents   cmn:PackagingItemCode   <b>@type</b>     | Valid packaging item code type required if packagingItemCode is populated !!!                            | The error occurs if cmn:PackagingItemCode is populated, but the source is either not a valid value from the enumeration list or is empty or null.     |
| cmn:HeterogeneousContainer   cmn:ContainerContents   <b>cmn:LotNumber</b>                     | Lot number is required !!!                                                                               | The error occurs if the source is empty or null.                                                                                                      |
| cmn:HeterogeneousContainer   cmn:ContainerContents   <b>cmn:CustomsValue</b>                  | Customs value is required !!!                                                                            | The error occurs if cmn:clearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| cmn:HeterogeneousContainer   cmn:ContainerContents   cmn:CustomsValue   <b>@currencyCode</b>  | Valid currency code for customs value is required !!!                                                    | The error occurs if the source is less than 3 characters, or is empty or null.                                                                        |
| cmn:HeterogeneousContainer   cmn:ContainerContents   cmn:TransactionIdentifier   <b>@type</b> | Valid transaction identifier type is required !!!                                                        | The error occurs if cmn:transactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |
| cmn:HeterogeneousContainer   cmn:ContainerContents                                            | Transaction date is required !!!                                                                         | The error occurs if the source is empty or null.                                                                                                      |

| Data Element                                                  | Error Message                                                                                                                                                                                                                                      | Description                                                                                                                                               |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| cmn:TransactionIdentifier   @date                             |                                                                                                                                                                                                                                                    |                                                                                                                                                           |
| Class 2                                                       |                                                                                                                                                                                                                                                    |                                                                                                                                                           |
| cmn:Serial                                                    | Serial Number <SerialNumber> does not exist.                                                                                                                                                                                                       | The error occurs if the serial number does not exist in TraceLink.                                                                                        |
|                                                               | Serial Number <Serial> was never commissioned.                                                                                                                                                                                                     | The error occurs if the status of the serial number is not commissioned or registered.                                                                    |
|                                                               | Serial Number <Serial> is repeated in the transaction. All serial numbers should appear only once.                                                                                                                                                 | The error occurs if a serial number appears multiple times in this message.                                                                               |
| cmn:Items   cmn:NumberList   <b>cmn:Serial</b>                | All serial numbers per row must belong to the same product (GTIN).                                                                                                                                                                                 | The error occurs if loose item serial numbers do not belong to the same product.                                                                          |
|                                                               | Loose Item Serial Numbers must be in GTIN (01) (21) format.                                                                                                                                                                                        | The error occurs if a loose item serial number is not in GTIN(01)(21) format.                                                                             |
|                                                               | Serial Number <Serial> is not disaggregated from parent serial number.                                                                                                                                                                             | The error occurs if a loose item serial number is aggregated to a parent serial number.                                                                   |
|                                                               | Serial Number <Serial> has Packaging Level of <PackagingLevel>. Loose Item serial numbers must have Packaging Level of Each.                                                                                                                       | The error occurs if a loose item serial number is not at the "each" packaging level.                                                                      |
| cmn:HomogeneousContainer   cmn:NumberList   <b>cmn:Serial</b> | Serial Numbers for pallets and cases must be in SSCC (00) format.                                                                                                                                                                                  | The error occurs if serial numbers are not in SSCC(00) format.                                                                                            |
|                                                               | Container Serial Number <Serial> contains items that belong to multiple products or lots. This container must be entered as a Mixed Container                                                                                                      | The error occurs if the serial number includes different products or lots instead of a single product or lot.                                             |
| cmn:HeterogeneousContainer   <b>cmn:Serial</b>                | Serial Numbers for pallets and cases must be in SSCC (00) format.                                                                                                                                                                                  | The error occurs if serial numbers are not in SSCC(00) format.                                                                                            |
| cmn:PackagingItemCode                                         | Packaging Code <PackagingCode> does not exist.                                                                                                                                                                                                     | The error occurs if the packaging code is not a GTIN.                                                                                                     |
| cmn:PackagingItemCode, cmn:LotNumber                          | Container Serial Number <Serial> must include country clearance information for each unique product within the container. The following items are missing from this transaction: <list of packaging code-Lot Number combinations that are missing> | The error occurs if the heterogeneous container contains a Packaging Item Code and Lot Number combination that is not included in the message.            |
| cmn:PackagingItemCode, cmn:LotNumber                          | Lot <Packaging Code - Lot Number> in heterogeneous container serial number <serial> cannot appear multiple times in the container                                                                                                                  | The error occurs if the Packaging Item Code and Lot Number combination is repeated in this message within a single heterogeneous container serial number. |
| cmn:PackagingItemCode, cmn:LotNumber                          | Item <Packaging Code - Lot Number> does not exist in container serial number <Serial>                                                                                                                                                              | The error occurs if the Packaging Item Code and Lot Number combination does not exist in the heterogeneous container.                                     |

| Data Element                                                                                                                                                      | Error Message | Description |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|
| Class 3                                                                                                                                                           |               |             |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |               |             |

## Country Clearance (EPCIS v1.2)

### Guidelines

**Message Type:** SOM\_COUNTRY\_CLEARANCE

**Info Exchange Display Name:** Country Clearance

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element                        | Occurs Length | Type     | Description                                                                                                                                            |
|-------------------------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument                 | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                           |
| @schemaVersion                      | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                            |
| @creationDate                       | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                          |
| EPCISHeader                         | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                          |
| sbdh:StandardBusinessDocumentHeader | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification. |

<sup>1</sup>1.2

<sup>2</sup>2018-04-30T22:08:02Z

| Data Element |  |  |                    |                 | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--------------------|-----------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | sbdh:HeaderVersion |                 | 1...1<br>0/*  | String | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <b>1.0</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | sbdh:Sender        |                 | 1...*<br>-    | -      | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |                    | sbdh:Identifier | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>2</sup></p> <p>Send SGLN and all other party types with the GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> <div>  GLNs do not have an urn/http prefix. </div> |
|              |  |  |                    | @Authority      | 1...1<br>1/*  | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>3</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                 |
|              |  |  | sbdh:Receiver      |                 | 1...*<br>-    | -      | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |                    | sbdh:Identifier | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup></p> <p>Send SGLN and all other party types with the GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p>                                                                                                                                       |

<sup>1</sup>1.0<sup>2</sup>1100001014507<sup>3</sup>GLN<sup>4</sup>0614141123452

| Data Element |           |  |                             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                     |
|--------------|-----------|--|-----------------------------|--------------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |  |                             |                          |               |          |  GLNs do not have an urn/http prefix.                                                                                                                                                                                        |
|              |           |  |                             | @Authority               | 1...1<br>1/*  | String   | <b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to "GLN" for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>1</sup> See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.                |
|              |           |  | sbdh:DocumentIdentification |                          | 1...1<br>-    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                             |
|              |           |  |                             | sbdh:Standard            | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>2</sup>                                                                                                                                                  |
|              |           |  |                             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a> . <sup>3</sup>                                          |
|              |           |  |                             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>4</sup>                                                                         |
|              |           |  |                             | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> The document type. The Type value is set to <a href="#">Events</a> for a commission event. <sup>5</sup>                                                                                                                                                                                        |
|              |           |  |                             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <a href="#">Z</a> . <sup>6</sup> |
|              | EPCISBody |  |                             |                          | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                             |
|              | EventList |  |                             |                          | 1...1<br>-    | -        | <b>Required.</b> <b>EventList</b> must include one or more instances of <b>ObjectEvent</b> for country clearance.                                                                                                                                                                                               |

<sup>1</sup>GLN<sup>2</sup>EPCglobal<sup>3</sup>1.0<sup>4</sup>000001<sup>5</sup>Events<sup>6</sup>2018-04-30T22:08:02Z

| Data Element |  |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|---------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | ObjectEvent         | 1...*<br>-    | -        | <b>Required.</b> The ObjectEvent indicates the message type. Indicates a country clearance event when: <ul style="list-style-type: none"> <li><b>action</b> = <code>OBSERVE</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:inspecting</code></li> <li><b>disposition</b> = <code>http://epcis.tracelink.com/disp/cleared_customs</code></li> </ul>            |
|              |  |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the Z to be appended if it is not included; however, the system assumes that the time is GMT and therefore appends the Z. <sup>1</sup> |
|              |  |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for eventTime. Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                |
|              |  |  |  | epcList             | 1...1<br>-    | -        | This element group is not mapped. Send an empty tag (<epcList/>). Serial numbers are mapped from the <b>tl:itemList</b> , <b>tl:homogeneousContainersList</b> , and <b>tl:heterogeneousContainersList</b> element groups in <b>tl:countryClearanceEventExtensions</b> .                                                                                                         |
|              |  |  |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The action type of the event. This value must equal <code>OBSERVE</code> . <sup>3</sup>                                                                                                                                                                                                                                                                        |
|              |  |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The business step taken in the event. This value must equal <code>urn:epcglobal:cbv:bizstep:inspecting</code> . <sup>4</sup>                                                                                                                                                                                                                                   |
|              |  |  |  | disposition         | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The status of the message. This value must equal <code>http://epcis.tracelink.com/disp/cleared_customs</code> . <sup>5</sup>                                                                                                                                                                                                                                   |
|              |  |  |  | readPoint           | 0...1<br>-    | -        | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a more granular location identifier. For country clearance, this is the importing party identifier.                                                                                                                                                               |
|              |  |  |  | id                  | 1...1<br>0/*  | AnyURI   | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a finer-grain location identifier. For country clearance, this is the importing party identifier. <sup>6</sup> See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                                                                   |

<sup>1</sup>2018-04-30T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>OBSERVE<sup>4</sup>urn:epcglobal:cbv:bizstep:inspecting<sup>5</sup>http://epcis.tracelink.com/disp/cleared\_customs<sup>6</sup>urn:epc:id:sgln:7777776.67345.0

| Data Element |  |  |  |                                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                         |
|--------------|--|--|--|------------------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:countryClearanceEventExtensions | 0...1<br>-    | -      | Main extension body.                                                                                                                                                                                                                                |
|              |  |  |  | tl:clearanceType                   | 1...1<br>1/*  | String | <b>Required.</b> Identifies the clearance type. <sup>1</sup><br>See the <a href="#">ClearanceType</a> enumeration list for valid values.                                                                                                            |
|              |  |  |  | tl:importFromCountry               | 1...1<br>1/*  | String | <b>Required.</b> Country the product is being imported from using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>2</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  | tl:importToCountry                 | 1...1<br>1/*  | String | <b>Required.</b> Country the product is being imported into using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>3</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  | tl:registrationDate                | 0...1<br>0/*  | Date   | <b>Conditionally required</b> if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Registration date in YYYY-MM-DD XML date format. <sup>4</sup>                                                                                                           |
|              |  |  |  | tl:customsAuthorityCode            | 0...1<br>0/*  | String | <b>Conditionally required</b> for Russia if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Customs authority code. <sup>5</sup>                                                                                                                         |
|              |  |  |  | tl:declarationReleaseNumber        | 0...1<br>0/*  | String | <b>Conditionally required</b> for Russia if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Declaration release number for product. <sup>6</sup>                                                                                                         |
|              |  |  |  | tl:actionCode                      | 0...1<br>0/*  | String | <b>Conditionally required</b> for Russia if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Action code. <sup>7</sup><br>See the <a href="#">ActionCode</a> enumeration list for valid values.                                                           |
|              |  |  |  | tl:importingPartyId                | 1...1<br>1/*  | String | <b>Required.</b> Importing party identifier. <sup>8</sup>                                                                                                                                                                                           |
|              |  |  |  | @type                              | 1...1<br>1/*  | String | <b>Required.</b> Importing party identifier type. <sup>9</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                  |

<sup>1</sup>CUSTOMS<sup>2</sup>FR<sup>3</sup>RU<sup>4</sup>2019-05-14<sup>5</sup>201960876<sup>6</sup>198765<sup>7</sup>DOMESTIC<sup>8</sup>0333331013655<sup>9</sup>GLN



| Data Element |  |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                       |
|--------------|--|--|--|--|------------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:itemList                  | 0...1<br>-    | -       | <b>Conditionally required</b> if both <b>tl:homogeneousContainersList</b> and <b>tl:heterogeneousContainersList</b> are not populated. List of items. Each item is a single product of loose items (e.g. sampled serial numbers). |
|              |  |  |  |  | tl:items                     | 1...*<br>-    | -       | <b>Required.</b> Products that are being imported. One item will be present for each unique product.                                                                                                                              |
|              |  |  |  |  | tl:numberList                | 1...1<br>1/*  | String  | <b>Required.</b> Contains the list of serial numbers of eaches.                                                                                                                                                                   |
|              |  |  |  |  | tl:serial                    | 1...*<br>1/*  | String  | <b>Required.</b> The serial number being imported. Serial number is expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(01)(21) formatted serial number for GTINs. <sup>1</sup>            |
|              |  |  |  |  | tl:customsValue              | 0...1<br>-    | Decimal | <b>Conditionally required</b> if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Per unit customs cost for each order item in order item list. <sup>2</sup>                                                                            |
|              |  |  |  |  | @currencyCode                | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>3</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                             |
|              |  |  |  |  | tl:transactionIdentifier     | 0...*<br>0/*  | String  | The transaction identifier associated with the country clearance. <sup>4</sup>                                                                                                                                                    |
|              |  |  |  |  | @type                        | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>5</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.                                                                               |
|              |  |  |  |  | @date                        | 1...1<br>-    | Date    | <b>Required.</b> Transaction date attribute in YYYY-MM-DD format. <sup>6</sup>                                                                                                                                                    |
|              |  |  |  |  | tl:homogeneousContainersList | 0...1<br>-    | -       | <b>Conditionally required</b> if both <b>tl:itemList</b> and <b>tl:heterogeneousContainersList</b> are not populated. List of homogeneous containers. Each container represents one or more batches of the same product.          |
|              |  |  |  |  | tl:homogeneousContainer      | 1...*<br>-    | -       | <b>Required.</b> Cases or pallets containing the same product.                                                                                                                                                                    |
|              |  |  |  |  | tl:numberList                | 1...1         | String  | <b>Required.</b> Contains the list of serial numbers of eaches.                                                                                                                                                                   |

<sup>1</sup>015088202501033321100000060001<sup>2</sup>1976.00<sup>3</sup>RUB<sup>4</sup>9876987321<sup>5</sup>CERTIFICATECONFORMITY<sup>6</sup>2019-05-12

| Data Element |  |  |  |  |  |  |                                | Occurs Length | Type    | Description                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|--|--|--------------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:serial                      | 1...*<br>1/*  | String  | <b>Required.</b> Contains the serial number or numbers that are being imported. Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI(01)(21) formatted serial number for GTINs. <sup>1</sup> |
|              |  |  |  |  |  |  | tl:customsValue                | 0...1<br>0/*  | Decimal | <b>Conditionally required</b> if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Per unit customs cost for each order item in order item list. <sup>2</sup>                                                                                           |
|              |  |  |  |  |  |  | @currencyCode                  | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>3</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                            |
|              |  |  |  |  |  |  | tl:transactionIdentifier       | 0...*<br>0/*  | String  | The transaction identifier associated with the country clearance. <sup>4</sup>                                                                                                                                                                   |
|              |  |  |  |  |  |  | @type                          | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>5</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.                                                                                              |
|              |  |  |  |  |  |  | @date                          | 1...1<br>-    | Date    | <b>Required.</b> Transaction date attribute. <sup>6</sup>                                                                                                                                                                                        |
|              |  |  |  |  |  |  | tl:heterogeneousContainersList | 0...1<br>-    | -       | <b>Conditionally required</b> if both <b>tl:itemList</b> and <b>tl:homogeneousContainersList</b> are not populated. List of heterogeneous containers. Each container is a case or pallet with different products inside.                         |
|              |  |  |  |  |  |  | tl:heterogeneousContainer      | 1...*<br>-    | -       | <b>Required.</b> Case or pallet containing a mix of different products.                                                                                                                                                                          |
|              |  |  |  |  |  |  | tl:serial                      | 1...1<br>1/*  | String  | <b>Required.</b> Contains the serial number or numbers that are being imported. Serial number expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(00) formatted serial numbers for SSCCs. <sup>7</sup>    |
|              |  |  |  |  |  |  | tl:containerContents           | 1...*<br>-    | -       | <b>Required.</b> Contents of heterogeneous containers.                                                                                                                                                                                           |

<sup>1</sup>015088202501033321100000060010<sup>2</sup>1976.00<sup>3</sup>RUB<sup>4</sup>9876987324<sup>5</sup>CERTIFICATECONFORMITY<sup>6</sup>2019-05-12<sup>7</sup>00508820250103332110

| Data Element |  |  |  |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                             |
|--------------|--|--|--|--|--|--|--------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:packagingItemCode     | 1...1<br>1/*  | String  | <b>Required.</b> The packaging level item code (e.g. GTIN-14, CN-ResCode) associated with the serialized items that are being imported. <sup>1</sup>    |
|              |  |  |  |  |  |  | @type                    | 1...1<br>1/*  | String  | <b>Required.</b> The product code type for the packaging item code. <sup>2</sup><br>See the <a href="#">ItemCode</a> enumeration list for valid values. |
|              |  |  |  |  |  |  | cbvmda:lotNumber         | 1...1<br>1/*  | String  | <b>Required.</b> The lot number associated with the specified serial numbers used to identify the serial numbers that are being updated. <sup>3</sup>   |
|              |  |  |  |  |  |  | tl:customsValue          | 0...1<br>0/*  | Decimal | <b>Required.</b> Per unit customs cost for each order item in order item list. <sup>4</sup>                                                             |
|              |  |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>5</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.   |
|              |  |  |  |  |  |  | tl:transactionIdentifier | 0...*<br>0/*  | String  | The transaction identifier(s) associated with the country clearance, if available. <sup>6</sup>                                                         |
|              |  |  |  |  |  |  | @type                    | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>7</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.     |
|              |  |  |  |  |  |  | @date                    | 1...1<br>-    | Date    | <b>Required.</b> Transaction date attribute. <sup>8</sup>                                                                                               |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:tl="http://epcis.tracelink.com/ns" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2019-05-15T17:45:20.00Z">
  <EPCISHeader>
```

<sup>1</sup>00882025030223

<sup>2</sup>GTIN-14

<sup>3</sup>ABC123

<sup>4</sup>1976.00

<sup>5</sup>RUB

<sup>6</sup>9876987327

<sup>7</sup>CERTIFICATECONFORMITY

<sup>8</sup>2019-05-12

```

<sbdh:StandardBusinessDocumentHeader>
  <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
  <sbdh:Sender>
    <sbdh:Identifier Authority="GLN">0882028677019</sbdh:Identifier>
  </sbdh:Sender>
  <sbdh:Receiver>
    <sbdh:Identifier Authority="GLN">0333331013655</sbdh:Identifier>
  </sbdh:Receiver>
  <sbdh:DocumentIdentification>
    <sbdh:Standard>EPCglobal</sbdh:Standard>
    <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
    <sbdh:InstanceIdentifier>201901311745200001</sbdh:InstanceIdentifier>
    <sbdh:Type>Events</sbdh:Type>
    <sbdh:CreationDateAndTime>2019-05-15T17:45:20.00Z</sbdh:CreationDateAndTime>
  </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <ObjectEvent>
      <eventTime>2019-05-15T00:12:23.8307Z</eventTime>
      <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
      <epcList/>
      <action>OBSERVE</action>
      <bizStep>urn:epcglobal:cbv:bizstep:inspecting</bizStep>
      <disposition>http://epcis.tracelink.com/disp/cleared_customs</disposition>
      <readPoint>
        <id>urn:epc:id:sgln:7777776.67345.0</id>
      </readPoint>
      <tl:countryClearanceEventExtensions>
        <tl:clearanceType>CUSTOMS</tl:clearanceType>
        <tl:importFromCountry>FR</tl:importFromCountry>
        <tl:importToCountry>RU</tl:importToCountry>
        <tl:registrationDate>2019-07-14</tl:registrationDate>
        <tl:customsAuthorityCode>201960876</tl:customsAuthorityCode>
        <tl:declarationReleaseNumber>198765</tl:declarationReleaseNumber>
        <tl:actionCode>EXPORT</tl:actionCode>
        <tl:importingPartyId type="BR_CNES">0333331013655</tl:importingPartyId>
        <tl:itemList>
          <tl:items>

```

```

        <tl:numberList>
          <tl:serial>015088202501033321100000060001</tl:serial>
          <tl:serial>015088202501033321100000060002</tl:serial>
          <tl:serial>015088202501033321100000060003</tl:serial>
          <tl:serial>015088202501033321100000060004</tl:serial>
          <tl:serial>015088202501033321100000060005</tl:serial>
        </tl:numberList>
        <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
        <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-
12">9876987321</tl:transactionIdentifier>
        <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-07-
12">4875986412</tl:transactionIdentifier>
      </tl:items>
    <tl:items>
      <tl:numberList>
        <tl:serial>015088202501033321100000060006</tl:serial>
        <tl:serial>015088202501033321100000060007</tl:serial>
        <tl:serial>015088202501033321100000060008</tl:serial>
        <tl:serial>015088202501033321100000060009</tl:serial>
        <tl:serial>015088202501033321100000060010</tl:serial>
      </tl:numberList>
      <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
      <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-
12">9876987322</tl:transactionIdentifier>
      <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-07-
12">4875986413</tl:transactionIdentifier>
    </tl:items>
  </tl:itemList>
  <tl:homogeneousContainersList>
    <tl:homogeneousContainer>
      <tl:numberList>
        <tl:serial>015088202501033321100000060011</tl:serial>
        <tl:serial>015088202501033321100000060012</tl:serial>
        <tl:serial>015088202501033321100000060013</tl:serial>
        <tl:serial>015088202501033321100000060014</tl:serial>
        <tl:serial>015088202501033321100000060015</tl:serial>
      </tl:numberList>
      <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
      <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-
12">9876987324</tl:transactionIdentifier>
    </tl:homogeneousContainer>
  </tl:homogeneousContainersList>

```

```

        <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-07-
12">4875986415</tl:transactionIdentifier>
    </tl:homogeneousContainer>
    <tl:homogeneousContainer>
        <tl:numberList>
            <tl:serial>015088202501033321100000060016</tl:serial>
            <tl:serial>015088202501033321100000060017</tl:serial>
            <tl:serial>015088202501033321100000060018</tl:serial>
            <tl:serial>015088202501033321100000060019</tl:serial>
            <tl:serial>015088202501033321100000060020</tl:serial>
        </tl:numberList>
        <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
        <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-
12">9876987326</tl:transactionIdentifier>
        <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-07-
12">4875986417</tl:transactionIdentifier>
    </tl:homogeneousContainer>
</tl:homogeneousContainersList>
<tl:heterogeneousContainersList>
    <tl:heterogeneousContainer>
        <tl:serial>urn:epc:id:sscc:030944.10105363280</tl:serial>
        <tl:containerContents>
            <tl:packagingItemCode type="GTIN-14">00882025030223</tl:packagingItemCode>
            <cbvmda:lotNumber>ABC123</cbvmda:lotNumber>
            <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
            <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-
12">9876987327</tl:transactionIdentifier>
            <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-07-
12">4875986418</tl:transactionIdentifier>
        </tl:containerContents>
    </tl:heterogeneousContainer>
    <tl:heterogeneousContainer>
        <tl:serial>urn:epc:id:sscc:030944.10105363281</tl:serial>
        <tl:containerContents>
            <tl:packagingItemCode type="GTIN-14">00882025030233</tl:packagingItemCode>
            <cbvmda:lotNumber>ABC456</cbvmda:lotNumber>
            <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
            <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-
12">9876988327</tl:transactionIdentifier>
            <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-07-

```

```

12">4875987418</tl:transactionIdentifier>
    </tl:containerContents>
</tl:heterogeneousContainer>
<tl:heterogeneousContainer>
    <tl:serial>urn:epc:id:sscc:030944.10105363282</tl:serial>
    <tl:containerContents>
        <tl:packagingItemCode type="GTIN-14">00882025030244</tl:packagingItemCode>
        <cbvmda:lotNumber>ABC789</cbvmda:lotNumber>
        <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
        <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-07-
12">9876987328</tl:transactionIdentifier>
            <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-07-
12">4875986419</tl:transactionIdentifier>
                </tl:containerContents>
            </tl:heterogeneousContainer>
        </tl:heterogeneousContainersList>
    </tl:countryClearanceEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element     | Error Message                                                                                           | Description                                                                                      |
|------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Class 1          |                                                                                                         |                                                                                                  |
| action           | Action OBSERVE is required for country clearance event !!!                                              | The error occurs if the source does not equal "OBSERVE".                                         |
| bizStep          | bizStep urn:epcglobal:cbv:bizstep:inspecting is required for country clearance event !!!                | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:inspecting".            |
| disposition      | Disposition http://epcis.tracelink.com/disp/cleared_customs is required for country clearance event !!! | The error occurs if the source does not equal "http://epcis.tracelink.com/disp/cleared_customs". |
| readPoint        | Valid readPoint identifier type is required !!!                                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.    |
|                  | Event location in the country clearance event is required !!!                                           | The error occurs if the source is empty or null.                                                 |
| tl:clearanceType | Valid clearance type code is required !!!                                                               | The error occurs if the source is empty or null, or is not a valid value                         |

| Data Element                                               | Error Message                                                                                            | Description                                                                                                                                          |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                            |                                                                                                          | from the enumeration list.                                                                                                                           |
| tl:importFromCountry                                       | Valid import from country is required !!!                                                                | The error occurs if the source is not 2 characters, or is empty or null.                                                                             |
| tl:importToCountry                                         | Valid import to country is required !!!                                                                  | The error occurs if the source is not 2 characters, or is empty or null.                                                                             |
| tl:registrationDate                                        | Registration date is required !!!                                                                        | The error occurs if tl:clearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| tl:actionCode                                              | Valid action code is required !!!                                                                        | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                  |
| tl:importingPartyId                                        | Importing party identifier is required !!!                                                               | The error occurs if the source is empty or null.                                                                                                     |
| tl:importingPartyId   @type                                | Valid importing party identifier type is required !!!                                                    | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                  |
| tl:items                                                   | At least one of Item List, Homogeneous Containers List, or Heterogeneous Containers List is required !!! | The error occurs if tl:itemList, tl:homogeneousContainersList, and tl:heterogeneousContainersList are all empty or null.                             |
| tl:items   tl:numberList   tl:serial                       | Serial number is required if itemList is present !!!                                                     | The error occurs if the source is empty or null.                                                                                                     |
| tl:items   tl:customsValue                                 | Customs value is required !!!                                                                            | The error occurs if tl:clearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| tl:items   tl:customsValue   @currencyCode                 | Valid currency code for customs value is required !!!                                                    | The error occurs if the source is less than 3 characters, or is empty or null.                                                                       |
| tl:items   tl:transactionIdentifier   @type                | Valid transaction identifier type is required !!!                                                        | The error occurs if tl:transactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |
| tl:items   tl:transactionIdentifier   @date                | Transaction date is required !!!                                                                         | The error occurs if the source is empty or null.                                                                                                     |
| tl:homogeneousContainer                                    | At least one of Item List, Homogeneous Containers List, or Heterogeneous Containers List is required !!! | The error occurs if tl:itemList, tl:homogeneousContainersList, and tl:heterogeneousContainersList are all empty or null.                             |
| tl:homogeneousContainer   tl:numberList   tl:serial        | Serial number is required if homogeneousContainersList is present !!!                                    | The error occurs if the source is empty or null.                                                                                                     |
| tl:homogeneousContainer   tl:customsValue                  | Customs value is required !!!                                                                            | The error occurs if tl:clearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| tl:homogeneousContainer   tl:customsValue   @currencyCode  | Valid currency code for customs value is required !!!                                                    | The error occurs if the source is less than 3 characters, or is empty or null.                                                                       |
| tl:homogeneousContainer   tl:transactionIdentifier   @type | Valid transaction identifier type is required !!!                                                        | The error occurs if tl:transactionIdentifier is populated, but the source is                                                                         |



| Data Element                                                                               | Error Message                                                                                            | Description                                                                                                                                          |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                            |                                                                                                          | either not a valid value from the enumeration list or is empty or null.                                                                              |
| tl:homogeneousContainer   tl:transactionIdentifier   <b>@date</b>                          | Transaction date is required !!!                                                                         | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer                                                                  | At least one of Item List, Homogeneous Containers List, or Heterogeneous Containers List is required !!! | The error occurs if tl:itemList, tl:homogeneousContainersList, and tl:heterogeneousContainersList are all empty or null.                             |
| tl:heterogeneousContainer   <b>tl:serial</b>                                               | Serial number is required if heterogeneousContainersList is present !!!                                  | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   <b>tl:packagingItemCode</b>             | Packaging item code is required !!!                                                                      | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   tl:packagingItemCode   <b>@type</b>     | Valid packaging item code type required if packagingItemCode is populated !!!                            | The error occurs if tl:packagingItemCode is populated, but the source is either not a valid value from the enumeration list or is empty or null.     |
| tl:heterogeneousContainer   tl:containerContents   <b>cbvmda:lotNumber</b>                 | Lot number is required !!!                                                                               | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   <b>tl:customsValue</b>                  | Customs value is required !!!                                                                            | The error occurs if tl:clearanceType = "CUSTOMS", but the source is empty or null.                                                                   |
| tl:heterogeneousContainer   tl:containerContents   tl:customsValue   <b>@currencyCode</b>  | Valid currency code for customs value is required !!!                                                    | The error occurs if the source is less than 3 characters, or is empty or null.                                                                       |
| tl:heterogeneousContainer   tl:containerContents   tl:transactionIdentifier   <b>@type</b> | Valid transaction identifier type is required !!!                                                        | The error occurs if tl:transactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |
| tl:heterogeneousContainer   tl:containerContents   tl:transactionIdentifier   <b>@date</b> | Transaction date is required !!!                                                                         | The error occurs if the source is empty or null.                                                                                                     |
| <b>Class 2</b>                                                                             |                                                                                                          |                                                                                                                                                      |
| tl:serial                                                                                  | Serial Number <SerialNumber> does not exist.                                                             | The error occurs if the serial number does not exist in TraceLink.                                                                                   |
|                                                                                            | Serial Number <Serial> was never commissioned.                                                           | The error occurs if the status of the serial number is not commissioned or registered.                                                               |
|                                                                                            | Serial Number <Serial> is repeated in the transaction. All serial numbers should appear only once.       | The error occurs if a serial number appears multiple times in this message.                                                                          |
| tl:items   tl:numberList   <b>tl:serial</b>                                                | All serial numbers per row must belong to the same product (GTIN).                                       | The error occurs if loose item serial numbers do not belong to the same product.                                                                     |
|                                                                                            | Loose Item Serial Numbers must be in GTIN (01) (21) format.                                              | The error occurs if a loose item serial number is not in GTIN(01)(21) format.                                                                        |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                                                      | Description                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   | Serial Number <Serial> is not disaggregated from parent serial number.                                                                                                                                                                             | The error occurs if a loose item serial number is aggregated to a parent serial number.                                                                   |
|                                                                                                                                                                   | Serial Number <Serial> has Packaging Level of <PackagingLevel>. Loose Item serial numbers must have Packaging Level of Each.                                                                                                                       | The error occurs if a loose item serial number is not at the "each" packaging level.                                                                      |
| tl:homogeneousContainer   tl:numberList   <b>tl:serial</b>                                                                                                        | Serial Numbers for pallets and cases must be in SSCC (00) format.                                                                                                                                                                                  | The error occurs if serial numbers are not in SSCC(00) format.                                                                                            |
|                                                                                                                                                                   | Container Serial Number <Serial> contains items that belong to multiple products or lots. This container must be entered as a Mixed Container                                                                                                      | The error occurs if the serial number includes different products or lots instead of a single product or lot.                                             |
| tl:heterogeneousContainer   <b>tl:serial</b>                                                                                                                      | Serial Numbers for pallets and cases must be in SSCC (00) format.                                                                                                                                                                                  | The error occurs if serial numbers are not in SSCC(00) format.                                                                                            |
| tl:packagingItemCode                                                                                                                                              | Packaging Code <PackagingCode> does not exist.                                                                                                                                                                                                     | The error occurs if the packaging code is not a GTIN.                                                                                                     |
| tl:packagingItemCode, tl:lotNumber                                                                                                                                | Container Serial Number <Serial> must include country clearance information for each unique product within the container. The following items are missing from this transaction: <list of packaging code-Lot Number combinations that are missing> | The error occurs if the heterogeneous container contains a Packaging Item Code and Lot Number combination that is not included in the message.            |
| tl:packagingItemCode, tl:lotNumber                                                                                                                                | Lot <Packaging Code - Lot Number> in heterogeneous container serial number <serial> cannot appear multiple times in the container                                                                                                                  | The error occurs if the Packaging Item Code and Lot Number combination is repeated in this message within a single heterogeneous container serial number. |
| tl:packagingItemCode, tl:lotNumber                                                                                                                                | Item <Packaging Code - Lot Number> does not exist in container serial number <Serial>                                                                                                                                                              | The error occurs if the Packaging Item Code and Lot Number combination does not exist in the heterogeneous container.                                     |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                                                    |                                                                                                                                                           |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                                                    |                                                                                                                                                           |

## ESM Country Clearance (EPCIS v1.2)

### Guidelines

**Message Type:** SOM\_ESM\_COUNTRY\_CLEARANCE

**Info Exchange Display Name:** ESM Country Clearance

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element        |                                     |                    |                 |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|-------------------------------------|--------------------|-----------------|--|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument |                                     |                    |                 |  | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                     | @schemaVersion                      |                    |                 |  | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2.1</a> .                                                                                                                                                                                                                                                                                                                                                                  |
|                     | @creationDate                       |                    |                 |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                      |
| EPCISHeader         |                                     |                    |                 |  | 0...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                     | sbdh:StandardBusinessDocumentHeader |                    |                 |  | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                             |
|                     |                                     | sbdh:HeaderVersion |                 |  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <a href="#">1.0.3</a> .                                                                                                                                                                                                                                                                                                                                                          |
|                     |                                     | sbdh:Sender        |                 |  | 1...<br>*     | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                        |
|                     |                                     |                    | sbdh:Identifier |  | 1...1<br>1/*  | String   | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>4</sup><br>Send SGLN and all other party types with the GS1-conformant uri prefix, for example: <ul style="list-style-type: none"><li>urn:epc:id:sgln:088202.867701.0</li><li>http://epcis.gs1us.org/hc/dea/loc/10023141</li></ul> <div> GLNs do not have an urn/http prefix.</div> |

<sup>1</sup>1.2<sup>2</sup>2016-12-18T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507

| Data Element |  |  |                             |            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|-----------------------------|------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |            |               |        | See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |                             | @Authority | 1...1<br>1/*  | String | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>1</sup><br>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.                                                                                                                                                                                                                                                                          |
|              |  |  | sbdh:Receiver               |            | 1...*<br>-    | -      | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                           |
|              |  |  | sbdh:Identifier             |            | 1...1<br>1/*  | String | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>2</sup><br>Send SGLN and all other party types with the GS1-conformant uri prefix, for example: <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <div>  GLNs do not have an urn/http prefix. </div> See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values. |
|              |  |  |                             | @Authority | 1...1<br>1/*  | String | <b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to "GLN" for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>3</sup><br>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                    |
|              |  |  | sbdh:DocumentIdentification |            | 1...1<br>-    | -      | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | sbdh:Standard               |            | 1...1<br>0/*  | String | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | sbdh:TypeVersion            |            | 1...1<br>0/*  | String | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>GLN<sup>2</sup>0614141123452<sup>3</sup>GLN<sup>4</sup>EPCglobal<sup>5</sup>1.0

| Data Element |           |  |  |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------|--|--|--------------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |  |  | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>1</sup>                                                                                                                                                        |
|              |           |  |  | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> Identifies the document type. The Type value is set to "Events" for a shipment event. <sup>2</sup>                                                                                                                                                                                                                                                                            |
|              |           |  |  | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> .                                                                                                               |
|              | EPCISBody |  |  |                          | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                            |
|              | EventList |  |  |                          | 1...1<br>-    | -        | <b>Required.</b> The <b>EventList</b> must include one or more Object Events for country clearance.                                                                                                                                                                                                                                                                                            |
|              |           |  |  | ObjectEvent              | 1...<br>*     | -        | <b>Required.</b> The <b>ObjectEvent</b> indicates the message type. Indicates a country clearance event when: <ul style="list-style-type: none"> <li>• <b>action</b> = <b>OBSERVE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:inspecting</b></li> <li>• <b>disposition</b> = <b>http://epcis.tracelink.com/disp/cleared_customs</b></li> </ul>                                |
|              |           |  |  | eventTime                | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the <b>Z</b> to be appended if it is not included, however, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>3</sup> |
|              |           |  |  | eventTimeZoneOffset      | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for eventTime. A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time, whether it is standard time or Daylight saving time. Per Section 7.2.8 of [EPCIS1.0.1]. <sup>4</sup>                           |
|              |           |  |  | epcList                  | 1...1<br>-    | -        | This element group is not mapped. Send an empty tag (i.e. <b>&lt;epcList/&gt;</b> ). Serial numbers are mapped from the <b>tl:itemList</b> , <b>tl:homogeneousContainersList</b> , and <b>tl:heterogeneousContainersList</b> element groups in <b>tl:countryClearanceEventExtensions</b> .                                                                                                     |

<sup>1</sup>201609201745200001<sup>2</sup>Events<sup>3</sup>2018-04-30T22:08:02Z<sup>4</sup>-04:00

| Data Element |  |  |  |                                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|------------------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | action                             | 1...1<br>0/*  | String | <b>Required.</b> The action type of the event. This value must equal <b>OBSERVE</b> . <sup>1</sup>                                                                                                                                                                                                              |
|              |  |  |  | bizStep                            | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step taken in the event. This value must equal <b>urn:epcglobal:cbv:bizstep:inspecting</b> . <sup>2</sup>                                                                                                                                                                         |
|              |  |  |  | disposition                        | 0...1<br>0/*  | AnyURI | <b>Required.</b> Indicates the status of the message. This value must equal <b>http://epcis.tracelink.com/disp/cleared_customs</b> . <sup>3</sup>                                                                                                                                                               |
|              |  |  |  | readPoint                          | 0...1<br>-    | -      | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a more granular location identifier. For country clearance, this is the importing party identifier.                                                                                               |
|              |  |  |  | id                                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a more granular location identifier. For country clearance, this is the importing party identifier. <sup>4</sup> See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values. |
|              |  |  |  | tl:countryClearanceEventExtensions | 0...1<br>-    | -      | Main extension body.                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:clearanceType                   | 1...1<br>1/*  | String | <b>Required.</b> Identifies the clearance type. <sup>5</sup> See the <a href="#">ClearanceType</a> enumeration list for valid values.                                                                                                                                                                           |
|              |  |  |  | tl:importFromCountry               | 1...1<br>1/*  | String | <b>Required.</b> Country the product is being imported from using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>6</sup>                                                                                                                                          |
|              |  |  |  | tl:importToCountry                 | 1...1<br>1/*  | String | <b>Required.</b> Country the product is being imported into using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>7</sup>                                                                                                                                          |
|              |  |  |  | tl:registrationDate                | 0...1<br>0/*  | Date   | <b>Conditionally required</b> if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Registration date in YYYY-MM-DD XML date format. <sup>8</sup>                                                                                                                                                                       |
|              |  |  |  | tl:customsAuthorityCode            | 0...1         | String | <b>Conditionally required</b> for Russia if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Customs authority code. <sup>9</sup>                                                                                                                                                                                     |

<sup>1</sup>OBSERVE<sup>2</sup>urn:epcglobal:cbv:bizstep:inspecting<sup>3</sup>http://epcis.tracelink.com/disp/cleared\_customs<sup>4</sup>urn:epc:id:sgln:7777776.67345.0<sup>5</sup>CUSTOMS<sup>6</sup>FR<sup>7</sup>RU<sup>8</sup>2019-05-14<sup>9</sup>201960876

| Data Element |  |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                          | 0...1<br>0/*  | String  | <b>Conditionally required</b> for Russia if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Declaration release number for product. <sup>1</sup>                                                                                     |
|              |  |  |  |  |                          | 0...1<br>0/*  | String  | <b>Conditionally required</b> for Russia if <b>tl:clearanceType</b> = <b>CUSTOMS</b> . Action code. <sup>2</sup><br>See the <a href="#">ActionCode</a> enumeration list for valid values.                                       |
|              |  |  |  |  |                          | 1...1<br>1/*  | String  | <b>Required</b> . Importing party identifier. <sup>3</sup>                                                                                                                                                                      |
|              |  |  |  |  | @type                    | 1...1<br>1/*  | String  | <b>Required</b> . Importing party identifier type. <sup>4</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                             |
|              |  |  |  |  | tl:itemList              | 0...1<br>-    | -       | <b>Conditionally required</b> if both <b>tl:homogeneousContainersList</b> and <b>tl:heterogeneousContainersList</b> are not present. List of items. Each item is a single product of loose items (e.g. sampled serial numbers). |
|              |  |  |  |  | tl:items                 | 1...*<br>-    | -       | <b>Required</b> . Products that are being imported. One item will be present for each unique product.                                                                                                                           |
|              |  |  |  |  | tl:numberList            | 1...1<br>1/*  | String  | <b>Required</b> . Contains the list of serial numbers of eaches.                                                                                                                                                                |
|              |  |  |  |  | tl:serial                | 1...1<br>1/*  | String  | <b>Required</b> . The serial number being imported. Serial number is expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(01) (21) formatted serial number for GTINs. <sup>5</sup>        |
|              |  |  |  |  | tl:customsValue          | 1...1<br>-    | Decimal | <b>Required</b> . Per unit customs cost for each order item in order item list. <sup>6</sup>                                                                                                                                    |
|              |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required</b> . Currency ISO code using ISO 4217-2015 format. <sup>7</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                          |
|              |  |  |  |  | tl:transactionIdentifier | 1...*<br>0/*  | String  | <b>Required</b> . The transaction identifier associated with the country clearance. <sup>8</sup>                                                                                                                                |

<sup>1</sup>198765<sup>2</sup>DOMESTIC<sup>3</sup>0333331013655<sup>4</sup>GLN<sup>5</sup>015088202501033321100000060001<sup>6</sup>1976.00<sup>7</sup>RUB<sup>8</sup>9876987321

| Data Element |  |  |  |  |                              |                          |               | Occurs Length | Type    | Description                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|------------------------------|--------------------------|---------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                              |                          | @type         | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>1</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.                                                                                          |
|              |  |  |  |  |                              |                          | @date         | 1...1<br>-    | Date    | <b>Required.</b> Transaction date attribute in YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                               |
|              |  |  |  |  | tl:homogeneousContainersList |                          |               | 0...1<br>-    | -       | <b>Conditionally required</b> if both <b>tl:itemList</b> and <b>tl:heterogeneousContainersList</b> are not present. List of homogeneous containers. Each container represents one or more batches of the same product.                       |
|              |  |  |  |  | tl:homogeneousContainer      |                          |               | 1...*<br>-    | -       | <b>Required.</b> Cases or pallets containing the same product.                                                                                                                                                                               |
|              |  |  |  |  |                              | tl:numberList            |               | 1...1<br>1/*  | String  | <b>Required.</b> Contains the list of serial numbers of cases or pallets.                                                                                                                                                                    |
|              |  |  |  |  |                              |                          | tl:serial     | 1...*<br>1/*  | String  | <b>Required.</b> Contains the serial number or numbers that are being imported. Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI(00) formatted serial number for SSCCs. <sup>3</sup> |
|              |  |  |  |  |                              | tl:customsValue          |               | 1...1<br>0/*  | Decimal | <b>Required.</b> Per unit customs cost for each order item in order item list. <sup>4</sup>                                                                                                                                                  |
|              |  |  |  |  |                              |                          | @currencyCode | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>5</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                        |
|              |  |  |  |  |                              | tl:transactionIdentifier |               | 1...*<br>0/*  | String  | <b>Required.</b> The transaction identifier associated with the country clearance. <sup>6</sup>                                                                                                                                              |
|              |  |  |  |  |                              |                          | @type         | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>7</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.                                                                                          |
|              |  |  |  |  |                              |                          | @date         | 1...1<br>-    | Date    | <b>Required.</b> Transaction date attribute. <sup>8</sup>                                                                                                                                                                                    |

<sup>1</sup>CERTIFICATECONFORMITY<sup>2</sup>2019-05-12<sup>3</sup>00138526195501000048<sup>4</sup>1976.00<sup>5</sup>RUB<sup>6</sup>9876987324<sup>7</sup>CERTIFICATECONFORMITY<sup>8</sup>2019-05-12



| Data Element |  |  |  |  |  |                                | Occurs Length | Type    | Description                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|--|--------------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:heterogeneousContainersList | 0...1<br>-    | -       | <b>Conditionally required</b> if both <b>tl:itemList</b> and <b>tl:homogeneousContainersList</b> are not present. List of heterogeneous containers. Every container is a case or pallet with different products inside.                      |
|              |  |  |  |  |  | tl:heterogeneousContainer      | 1...*<br>-    | -       | <b>Required.</b> Case or pallet containing a mix of different products.                                                                                                                                                                      |
|              |  |  |  |  |  | tl:serial                      | 1...1<br>1/*  | String  | <b>Required.</b> Contains the serial number or numbers that are being imported. Serial number expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(00) formatted serial number for SSCCs. <sup>1</sup> |
|              |  |  |  |  |  | tl:containerContents           | 1...*<br>-    | -       | <b>Required.</b> Contents of heterogeneous containers.                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:packagingItemCode           | 1...1<br>1/*  | String  | <b>Required.</b> The packaging level item code (e.g. GTIN-14, CN-ResCode) associated with the serialized items that are being imported. <sup>2</sup>                                                                                         |
|              |  |  |  |  |  | @type                          | 1...1<br>1/*  | String  | <b>Required.</b> The product code type for the packaging item code. <sup>3</sup><br>See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                      |
|              |  |  |  |  |  | cbvmda:lotNumber               | 1...1<br>1/*  | String  | <b>Required.</b> The lot number associated with the specified serial numbers used to identify the serial numbers that are being updated. <sup>4</sup>                                                                                        |
|              |  |  |  |  |  | tl:customsValue                | 1...1<br>0/*  | Decimal | <b>Required.</b> Per unit customs cost for each order item in order item list. <sup>5</sup>                                                                                                                                                  |
|              |  |  |  |  |  | @currencyCode                  | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>6</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                        |
|              |  |  |  |  |  | tl:transactionIdentifier       | 1...*<br>0/*  | String  | <b>Required.</b> The transaction identifier(s) associated with the country clearance, if available. <sup>7</sup>                                                                                                                             |
|              |  |  |  |  |  | @type                          | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>8</sup><br>See the <a href="#">ClearanceTransactionId</a> enumeration list for valid values.                                                                                          |

<sup>1</sup>00138526195501000055<sup>2</sup>00882025030223<sup>3</sup>GTIN-14<sup>4</sup>ABC123<sup>5</sup>1976.00<sup>6</sup>RUB<sup>7</sup>9876987327<sup>8</sup>CERTIFICATECONFORMITY

| Data Element |  |  |  |  |  |  |  |  |       | Occurs Length | Type | Description                                               |
|--------------|--|--|--|--|--|--|--|--|-------|---------------|------|-----------------------------------------------------------|
|              |  |  |  |  |  |  |  |  | @date | 1...1<br>-    | Date | <b>Required.</b> Transaction date attribute. <sup>1</sup> |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:tl="http://epcis.tracelink.com/ns" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2019-05-15T17:45:20.00Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">0882028677019</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">0333331013655</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>201901311745200001</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-05-15T17:45:20.00Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2019-05-15T00:12:23.8307Z</eventTime>
        <eventTimeZoneOffset>+00:00</eventTimeZoneOffset>
        <epcList/>
        <action>OBSERVE</action>
      </ObjectEvent>
    </EventList>
  </EPCISBody>
</EPCISDocument>
```

<sup>1</sup>2019-05-12

```

<bizStep>urn:epcglobal:cbv:bizstep:inspecting</bizStep>
<disposition>https://epcis.tracelink.com/disp/cleared_customs</disposition>
<readPoint>
  <id>urn:epc:id:sgln:7777776.67345.0</id>
</readPoint>
<tl:countryClearanceEventExtensions>
  <tl:clearanceType>CUSTOMS</tl:clearanceType>
  <tl:importFromCountry>FR</tl:importFromCountry>
  <tl:importToCountry>RU</tl:importToCountry>
  <tl:registrationDate>2019-05-14</tl:registrationDate>
  <tl:customsAuthorityCode>201960876</tl:customsAuthorityCode>
  <tl:declarationReleaseNumber>198765</tl:declarationReleaseNumber>
  <tl:actionCode>CUSTOMS</tl:actionCode>
  <tl:itemList>
    <tl:items>
      <tl:numberList>
        <tl:serial>015088202501033321100000060001</tl:serial>
        <tl:serial>015088202501033321100000060002</tl:serial>
        <tl:serial>015088202501033321100000060003</tl:serial>
        <tl:serial>015088202501033321100000060004</tl:serial>
        <tl:serial>015088202501033321100000060005</tl:serial>
      </tl:numberList>
      <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
      <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-05-12">9876987321</tl:transactionIdentifier>
      <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-05-12">4875986412</tl:transactionIdentifier>
    </tl:items>
    <tl:items>
      <tl:numberList>
        <tl:serial>015088202501033321100000060006</tl:serial>
        <tl:serial>015088202501033321100000060007</tl:serial>
        <tl:serial>015088202501033321100000060008</tl:serial>
        <tl:serial>015088202501033321100000060009</tl:serial>
        <tl:serial>015088202501033321100000060010</tl:serial>
      </tl:numberList>
      <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
      <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-05-12">9876987322</tl:transactionIdentifier>
      <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-05-

```

```

12">4875986413</tl:transactionIdentifier>
    </tl:items>
</tl:itemList>
<tl:homogenousContainersList>
    <tl:homogeneousContainer>
        <tl:numberList>
            <tl:serial>00138526195501000048</tl:serial>
            <tl:serial>00138526195501000049</tl:serial>
            <tl:serial>00138526195501000050</tl:serial>
            <tl:serial>00138526195501000051</tl:serial>
            <tl:serial>00138526195501000052</tl:serial>
        </tl:numberList>
        <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
        <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-05-
12">9876987324</tl:transactionIdentifier>
            <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-05-
12">4875986415</tl:transactionIdentifier>
                </tl:homogeneousContainer>
                <tl:homogeneousContainer>
                    <tl:numberList>
                        <tl:serial>00138526195501000055</tl:serial>
                        <tl:serial>00138526195501000056</tl:serial>
                        <tl:serial>00138526195501000057</tl:serial>
                        <tl:serial>00138526195501000058</tl:serial>
                        <tl:serial>00138526195501000059</tl:serial>
                    </tl:numberList>
                    <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
                    <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-05-
12">9876987326</tl:transactionIdentifier>
                        <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-05-
12">4875986417</tl:transactionIdentifier>
                            </tl:homogeneousContainer>
                        </tl:homogenousContainersList>
                    <tl:heterogenousContainersList>
                        <tl:heterogenousContainer>
                            <tl:serial>00138526195501000095</tl:serial>
                            <tl:containerContents>
                                <tl:packagingItemCode type="GTIN-14">00882025030223</tl:packagingItemCode>
                                <cbvmda:lotNumber>ABC123</cbvmda:lotNumber>
                                <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>

```

```

        <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-05-
12">9876987327</tl:transactionIdentifier>
        <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-05-
12">4875986418</tl:transactionIdentifier>
        </tl:containerContents>
    </tl:heterogenousContainer>
    <tl:heterogenousContainer>
        <tl:serial>00138526195501000088</tl:serial>
        <tl:containerContents>
            <tl:packagingItemCode type="GTIN-14">00882025030233</tl:packagingItemCode>
            <cbvmda:lotNumber>ABC456</cbvmda:lotNumber>
            <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
            <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-05-
12">9876988327</tl:transactionIdentifier>
            <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-05-
12">4875987418</tl:transactionIdentifier>
            </tl:containerContents>
        </tl:heterogenousContainer>
        <tl:heterogenousContainer>
            <tl:serial>00138526195501000077</tl:serial>
            <tl:containerContents>
                <tl:packagingItemCode type="GTIN-14">00882025030244</tl:packagingItemCode>
                <cbvmda:lotNumber>ABC789</cbvmda:lotNumber>
                <tl:customsValue currencyCode="RUB">1976.00</tl:customsValue>
                <tl:transactionIdentifier type="CERTIFICATECONFORMITY" date="2019-05-
12">9876987328</tl:transactionIdentifier>
                <tl:transactionIdentifier type="DECLARATIONCONFORMITY" date="2019-05-
12">4875986419</tl:transactionIdentifier>
            </tl:containerContents>
        </tl:heterogenousContainer>
    </tl:heterogenousContainersList>
</tl:countryClearanceEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                        | Error Message                                                                            | Description                                                                                         |
|-----------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Class 1                                             |                                                                                          |                                                                                                     |
| sbdh:Sender   sbdh:Identifier   <b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| sbdh:Receiver   sbdh:Identifier   <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| action                                              | Action OBSERVE is required for country clearance event !!!                               | The error occurs if the source does not equal "OBSERVE".                                            |
| bizStep                                             | bizStep urn:epcglobal:cbv:bizstep:inspecting is required for country clearance event !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:inspecting".               |
| readPoint                                           | Valid readPoint identifier type is required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.       |
| tl:clearanceType                                    | Valid clearance type code is required !!!                                                | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| tl:importFromCountry                                | Valid import from country is required !!!                                                | The error occurs if the source is greater than 2 characters, or is empty or null.                   |
| tl:importToCountry                                  | Valid import to country is required !!!                                                  | The error occurs if the source is greater than 2 characters, or is empty or null.                   |
| tl:registrationDate                                 | Registration date is required !!!                                                        | The error occurs if tl:clearanceType = "CUSTOMS", but the source is empty or null.                  |
| tl:actionCode                                       | Valid action code is required !!!                                                        | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| tl:importingPartyId                                 | Importing party identifier is required !!!                                               | The error occurs if the source is empty or null.                                                    |
| tl:importingPartyId   <b>@type</b>                  | Valid importing party identifier type is required !!!                                    | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. |
| tl:items   tl:numberList   <b>tl:serial</b>         | Serial number is required if itemList is present !!!                                     | The error occurs if the source is empty or null.                                                    |
| tl:items   <b>tl:customsValue</b>                   | Customs value is required !!!                                                            | The error occurs if the source is empty or null.                                                    |
| tl:items   tl:customsValue   <b>@currencyCode</b>   | Valid currency code for customs value is required !!!                                    | The error occurs if the source is less than 3 characters, or is empty or null.                      |
| tl:items   <b>tl:transactionIdentifier</b>          | Transaction identifier is required !!!                                                   | The error occurs if the source is empty or null.                                                    |

| Data Element                                                                               | Error Message                                                                 | Description                                                                                                                                          |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| tl:items   tl:transactionIdentifier   <b>@type</b>                                         | Valid transaction identifier type is required !!!                             | The error occurs if tl:transactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |
| tl:items   tl:transactionIdentifier   <b>@date</b>                                         | Transaction date is required !!!                                              | The error occurs if the source is empty or null.                                                                                                     |
| tl:homogeneousContainer   tl:numberList   <b>tl:serial</b>                                 | Serial number is required if homogeneousContainersList is present !!!         | The error occurs if the source is empty or null.                                                                                                     |
| tl:homogeneousContainer   <b>tl:customsValue</b>                                           | Customs value is required !!!                                                 | The error occurs if the source is empty or null.                                                                                                     |
| tl:homogeneousContainer   tl:customsValue   <b>@currencyCode</b>                           | Valid currency code for customs value is required !!!                         | The error occurs if the source is less than 3 characters, or is empty or null.                                                                       |
| tl:homogeneousContainer   <b>tl:transactionIdentifier</b>                                  | Transaction identifier is required !!!                                        | The error occurs if the source is empty or null.                                                                                                     |
| tl:homogeneousContainer   tl:transactionIdentifier   <b>@type</b>                          | Valid transaction identifier type is required !!!                             | The error occurs if tl:transactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |
| tl:homogeneousContainer   tl:transactionIdentifier   <b>@date</b>                          | Transaction date is required !!!                                              | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   <b>tl:serial</b>                                               | Serial number is required if heterogeneousContainersList is present !!!       | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   <b>tl:packagingItemCode</b>             | Packaging item code is required !!!                                           | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   tl:packagingItemCode   <b>@type</b>     | Valid packaging item code type required if packagingItemCode is populated !!! | The error occurs if tl:packagingItemCode is populated, but the source is either not a valid value from the enumeration list or is empty or null.     |
| tl:heterogeneousContainer   tl:containerContents   <b>cbvmda:lotNumber</b>                 | Lot number is required !!!                                                    | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   <b>tl:customsValue</b>                  | Customs value is required !!!                                                 | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   tl:customsValue   <b>@currencyCode</b>  | Valid currency code for customs value is required !!!                         | The error occurs if the source is less than 3 characters, or is empty or null.                                                                       |
| tl:heterogeneousContainer   tl:containerContents   <b>tl:transactionIdentifier</b>         | Transaction identifier is required !!!                                        | The error occurs if the source is empty or null.                                                                                                     |
| tl:heterogeneousContainer   tl:containerContents   tl:transactionIdentifier   <b>@type</b> | Valid transaction identifier type is required !!!                             | The error occurs if tl:transactionIdentifier is populated, but the source is either not a valid value from the enumeration list or is empty or null. |
| tl:heterogeneousContainer   tl:containerContents   tl:transactionIdentifier   <b>@date</b> | Transaction date is required !!!                                              | The error occurs if the source is empty or null.                                                                                                     |
| Class 2                                                                                    |                                                                               |                                                                                                                                                      |

| Data Element                                                                                                                                                      | Error Message                                                             | Description                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| tl:serial                                                                                                                                                         | Serial Number <SerialNumber> does not exist.                              | The error occurs if the serial number does not exist in TraceLink.                            |
|                                                                                                                                                                   | Serial Number <Serial> was never commissioned/registered.                 | The error occurs if the status of the serial number is not commissioned or registered.        |
| tl:packagingItemCode                                                                                                                                              | Packaging Code <PackagingCode> does not exist.                            | The error occurs if the packaging code is not a GTIN.                                         |
| cbvmdata:lotNumber                                                                                                                                                | Lot Number<LotNumber> does not exist for Packaging Code <PackagingCode> . | The error occurs if the specified lot number does not exist for the specified packaging code. |
| Class 3                                                                                                                                                           |                                                                           |                                                                                               |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                           |                                                                                               |



8

**Receipt**





# Receipt APIs

## Why do I use these messages?

Use the following messages to receive any type delivery (i.e. purchase, return, or transfer) and move the serial numbers from the delivery into inventory.

 Administrators for companies that Own Serialized Operations Manager can configure the app to automatically receive transfer shipments without submitting a receipt message. See the *Administration Online Help* for more information.

## Which reports do these messages generate?

These messages generate one of the following reports in the Russia Compliance application if their contents meet the report conditions:

- [701 - Accept](#) (for [603 - Move Owner Notification](#)) – Captures approval of items transferred from the manufacturing CMO to the MAH after the items have been part of a product release.
- [701 - Accept](#) (for [610 - Move Return Notification](#)) – Captures approval of items returned from the Wholesale Distributor to the MAH for the suspended products.
- [701 - Accept](#) (for [613 - Foreign Shipment Notification](#)) – Captures approval of items in a non-consignment direct order sent to the Russia Compliance Owner.
- [332 - Foreign Import](#) – Captures the receipt of serialized items imported to Russia as a non-consignment reverse order.
- [333 - Foreign Import Owner](#) – Captures the receipt of serialized items imported to Russia as an own funds or consignment order.
- [341 - Receive Importer](#) – Captures information about serialized items that are received at a warehouse in Russia after being cleared by customs for distribution.
- [701 - Accept](#) (for [601 - Move Order Notification](#)) – Captures approval of items purchased from or returned to a seller in Russia.

## Receipt (XML)

### Guidelines

This message allows shipment data to be received in two parts (i.e. shipment information and serial numbers). For example, shipment information can originate from an ERP system and serial numbers from WMS system or 3PL partner.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_RECEIPT

**Info Exchange Display Name:** Shipment Receipt

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element      |                       |                        | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                      |
|-------------------|-----------------------|------------------------|----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SOMReceiptMessage |                       |                        | 1...1<br>-     | -      | <b>Required.</b> The SOMReceiptMessage input is the root element of the Serialized Operations Manager Receipt message. This element contains additional elements/segments that detail the message's header information (e.g. sender, receiver information) as well as the body of the actual message. This is the first element in the document. |
|                   | som:ControlFileHeader |                        | 1...1<br>-     | -      | <b>Required.</b> The message document's header information.                                                                                                                                                                                                                                                                                      |
|                   |                       | cmn:FileSenderNumber   | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup>                                                                                                                                                                                                                                                                       |
|                   |                       | cmn:FileReceiverNumber | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's recipient. <sup>2</sup>                                                                                                                                                                                                                                                                    |
|                   |                       | cmn:FileControlNumber  | 1...1<br>1/20  | String | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>3</sup>                                                                                                                                                                                                               |
|                   |                       | cmn:FileDate           | 1...1<br>10/10 | Date   | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>4</sup>                                                                                                                                                                                                                             |
|                   |                       | cmn:FileTime           | 1...1          | Time   | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the Z to be                                                                                                                                                                                                                                                  |

<sup>1</sup>8888882028655

<sup>2</sup>8888882028677

<sup>3</sup>20130821063132

<sup>4</sup>2013-08-21

| Data Element |                 |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|-----------------|--------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                 |                          |               |         | <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              | som:MessageBody |                          | 1...1<br>-    | -       | <b>Required.</b> The Message Body includes all of the Serialized Operations Manager Receipt message details including, but not restricted to, location, delivery, and order information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |                 | cmn:LocationId           | 0..1<br>0/34  | String  | <b>Required.</b> The LocationId field specifies the identifier of the facility/warehouse so as to scope the Receipt status update for the serial numbers matching the specified item code and lot number only at the specified location. If the location is omitted, the Receipt status update will be applied globally to all matching serial numbers in the system. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |                 | cmn:DeliveryNumber       | 1...1<br>1/*  | String  | <b>Required.</b> This field indicates the DeliveryNumber that links the order information to the serialized pick information for this customer delivery. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |                 | cmn:DeliveryCompleteFlag | 1...1<br>1/*  | Boolean | <p><b>Required.</b> This mandatory field supports incremental receipts. If all of the information (e.g. order details, picked serial numbers) are provided in a single message, the delivery complete flag is set to true. Values must be lowercase.<sup>4</sup></p> <p>When set to true, the DeliveryCompleteFlag instructs TraceLink to:</p> <ol style="list-style-type: none"> <li>1. Process an outbound delivery.</li> <li>2. Update the status of all serial numbers and sub-child aggregations to be shipped.</li> <li>3. Trigger generation of regulatory reporting messages based on customer configuration.</li> </ol> <p>If only partial information is provided in the message (e.g. only the order details are provided and picked items are sent incrementally) the delivery complete flag is set to false for all intermediate messages. The flag is then set to true when all information has been communicated to TraceLink and the delivery is complete.</p> |
|              |                 | cmn:RegisterUnknownSNs   | 0..1<br>0/*   | Boolean | <p>Determines whether the serial numbers that are unknown to SOM should be registered. Valid values:<sup>5</sup></p> <ul style="list-style-type: none"> <li>• <b>true</b> – register all serial numbers that do not currently exist in Serialized Operations Manager in an available state.</li> <li>• <b>false</b> – (default) all serial numbers that do not currently exist in Serialized</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>06:31:32Z<sup>2</sup>8888882028655<sup>3</sup>4520010<sup>4</sup>true<sup>5</sup>false

| Data Element |  |                            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|----------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                            |               |         | Operations Manager are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  | som:OrderDetails           | 0...1<br>-    | -       | <b>Conditionally required</b> if <b>som:AddReceivedItems</b> is present. The OrderDetails complex message communicates pertinent details such as the business transaction identifiers, date, order item pick list, sender, and recipient information. This element is mandatory before the delivery complete flag can be set. However, it can be communicated at any time (e.g. with, before, or after the picked serial numbers have been communicated). |
|              |  | cmn:CorrectiveReceipt      | 0...1<br>0/*  | Boolean | Indicates that a new Serialized Operations Manager receipt is correcting a previously voided Serialized Operations Manager receipt. Valid values: <ul style="list-style-type: none"> <li><b>true</b> – The receipt is a corrective receipt.</li> <li><b>false</b> – (default) The receipt is not a corrective receipt.</li> </ul>                                                                                                                         |
|              |  | cmn:OriginalDeliveryNumber | 0...1<br>0/*  | String  | Original delivery number. Records the original delivery number that is replaced when a receipt is voided and corrections are made to that receipt.                                                                                                                                                                                                                                                                                                        |
|              |  | cmn:EntryPort              | 0...1<br>0/*  | String  | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                  |
|              |  | cmn:ExitPort               | 0...1<br>0/*  | String  | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                   |
|              |  | cmn:TransactionIdentifier  | 0...*<br>0/*  | String  | <b>Conditionally required</b> for the following countries:<br>The transaction identifier is associated with the picked serial numbers for regulatory reporting purposes. <sup>1</sup>                                                                                                                                                                                                                                                                     |
|              |  | @type                      | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. <sup>2</sup><br>See the <a href="#">TransactionId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                |
|              |  | @date                      | 0...1<br>0/*  | Date    | <b>Conditionally required</b> if <b>cmn:ShipToCountryCode</b> = <b>RU</b> . The transaction identifier date. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                 |
|              |  | cmn:TransactionDate        | 1...1<br>1/*  | Date    | <b>Required.</b> The date of the transaction in XML YYYY-MM-DD format. This field indicates the date when the transfer of ownership occurred between the shipper and receiver. <sup>4</sup>                                                                                                                                                                                                                                                               |

<sup>1</sup>PO303005 or D70301<sup>2</sup>RETURN<sup>3</sup>2019-03-30<sup>4</sup>2013-08-21

| Data Element |  |  |                             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|-----------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:TransactionTime         | 0...1<br>0/*  | Time    | The time of the transaction in XML HH:MM:SS format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | cmn:ShipToCountryCode       | 1...1<br>2/2  | String  | <b>Required.</b> Two-letter ISO country code for ship-to country. This value will be referenced to advise regulatory reporting if it is mandatory for the specified country market. Setting this value alone does not trigger regulatory reporting. The actual trigger for regulatory reporting is governed by customer administrative configuration in the TraceLink application. <sup>2</sup> See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                       |
|              |  |  | cmn:ShipFromCountryCode     | 0...1<br>2/2  | String  | <b>Required.</b> Two-letter ISO country code for the ship-from country. This value will be referenced to advise regulatory reporting if it is required for the specified country market. Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application. <sup>3</sup> See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                    |
|              |  |  | cmn:ReceiptDistributionType | 0...1<br>1/*  | String  | <b>Conditionally required</b> if <b>cmn:ReceiptDistributionType</b> was not provided in a previously saved incomplete or pending receipt for the delivery number. This field indicates which types of regulatory reporting may be triggered based on the nature of the transaction. Can send the ReceiptDistributionType in a previously saved incomplete or pending receipt for the delivery number.<br><br>See the <a href="#">ReceiptDistributionType</a> enumeration list for valid values. |
|              |  |  | cmn:TransferWithoutShipment | 0...1<br>0/*  | Boolean | Indicates that the serial numbers are already in an <b>Available</b> state because there is no associated shipment event. Valid values: <ul style="list-style-type: none"> <li><b>true</b> – Serial numbers are in the <b>Available</b> state.</li> <li><b>false</b> (default) – Serial numbers are in the <b>Pending Receipt</b> state.</li> </ul> Only use when <b>cmn:ReceiptDistributionType</b> = <b>INCOUNTRYTRANSFER</b> or <b>IMPORTTRANSFER</b> .                                      |
|              |  |  | cmn:SupplyType              | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>cmn:shipToCountryCode</b> = <b>KR</b> and <b>cmn:ReceiptDistributionType</b> = <b>INCOUNTRYRETURN</b> . Identifies the type of supply that is being performed using one of the permitted values. All values except for Collection apply.<br>See the <a href="#">SupplyType</a> enumeration list for valid values.                                                                                                                                           |

<sup>1</sup>02:30:55Z<sup>2</sup>US<sup>3</sup>US

| Data Element |  |  |                            | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                              |
|--------------|--|--|----------------------------|----------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                            |                |        |  Brazil: populate only if performing a Collection, Donation or SampleDistribution.                                                                                                                    |
|              |  |  | cmn:ContractType           | 0...1<br>0/*   | String | <b>Conditionally required</b> if cmn:ShipFromCountryCode = KR and cmn:SalesDistributionType = EXPORTSALE or INCOUNTRYSALE. Identifies if a private or competitive bid contract is used for the sale of goods.<br>See the <a href="#">ContractType</a> enumeration list for valid values. |
|              |  |  | cmn:Comments               | 0...1<br>0/*   | String | Optional remarks or comments associated with delivery.                                                                                                                                                                                                                                   |
|              |  |  | cmn:ContractNumber         | 0...1<br>0/*   | String | Identification number of the contract. <sup>1</sup>                                                                                                                                                                                                                                      |
|              |  |  | cmn:FundingSource          | 0...1<br>0/*   | String | <b>Required.</b> Source of the funding. <sup>2</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                         |
|              |  |  | cmn:DeliveryInspection     | 0...1<br>0/*   | String | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                      |
|              |  |  | cmn:DeliveryInspectionDate | 0...1<br>10/10 | Date   | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                       |
|              |  |  | cmn:DeliveryInspectionNote | 0...1<br>0/*   | String | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                      |
|              |  |  | cmn:RemovalFromCirculation | 0...1<br>0/*   | String | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                |
|              |  |  | cmn:AggregationInspection  | 0...1<br>0/*   | String | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                 |
|              |  |  | cmn:OrderItemList          | 0...1<br>-     | -      | <b>Conditionally required</b> if cmn:ShipToCountryCode = KR and ReceiptDistributionType = INCOUNTRYRETURN. Order item list group is populated to communicate the expected pick                                                                                                           |

<sup>1</sup>1234567<sup>2</sup>FederalBudgetFunds<sup>3</sup>2021-12-21



| Data Element |  |  |  |                                 | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|---------------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                                 |               |         | quantities for each item code at the EACH (unit) level. This information is used in verification of the actual serial number picked to verify the correct product, correct lot number (if provided) and correct each quantity.                                                                     |
|              |  |  |  | cmn:AllowShortVerificationCount | 0...1<br>0/*  | Boolean | Allow a short verification count flag. When comparing picked or received serial number counts in the ItemList counts this flag instructs the system to whether an error should be generated if the picked or received counts are less than expected. <sup>1</sup>                                  |
|              |  |  |  | cmn:OrderItem                   | 1...*<br>-    | -       | <b>Required.</b> Order item group is a repeating element that captures the item code, lot number, and quantity for each item that will be picked for the order. Each unique item code and lot number are communicated in a separate order item group.                                              |
|              |  |  |  | cmn:OrderItemNumber             | 0...1<br>0/*  | String  | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                        |
|              |  |  |  | choice%1                        | 1...1<br>-    | Choice  | <b>Required.</b> Populate only one of <b>cmn:InternalMaterialCode</b> , <b>cmn:PackagingItemCode</b> , or <b>cmn:CountryDrugCode</b> . One of the three options must be present.                                                                                                                   |
|              |  |  |  | cmn:InternalMaterialCode        | 0...1<br>1/*  | String  | <b>Conditionally required</b> if neither <b>cmn:PackagingItemCode</b> nor <b>cmn:CountryDrugCode</b> is present. Option 1 for choice%1 in <b>cmn:OrderItem</b> . Use to identify the product using the internal material number configured in Product Master Data. <sup>2</sup>                    |
|              |  |  |  | cmn:PackagingItemCode           | 0...1<br>1/*  | String  | <b>Conditionally required</b> if neither <b>cmn:InternalMaterialCode</b> nor <b>cmn:CountryDrugCode</b> is present. Option 2 for choice%1 in <b>cmn:OrderItem</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>3</sup> |
|              |  |  |  | @type                           | 0...1<br>0/*  | String  | <b>Required.</b> The product code type for the packaging item code using the supported enumeration values.<br>Valid values: <ul style="list-style-type: none"> <li>• <b>CN-RESCODE</b></li> <li>• <b>GTIN-14</b></li> <li>• <b>NTIN</b></li> </ul>                                                 |
|              |  |  |  | cmn:CountryDrugCode             | 0...1<br>1/*  | String  | <b>Conditionally required</b> if neither <b>cmn:InternalMaterialCode</b> nor <b>cmn:PackagingItemCode</b> is present. Option 3 for choice%1 in <b>cmn:OrderItem</b> . Use to identify the product using the country                                                                                |

<sup>1</sup>false<sup>2</sup>100253<sup>3</sup>00882026030229

| Data Element |  |  |  |  |                    | Occurs Length | Type    | Description                                                                                                                                                                                                     |
|--------------|--|--|--|--|--------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                    |               |         | 1                                                                                                                                                                                                               |
|              |  |  |  |  | @type              | 0...1<br>0/*  | String  | <b>Required.</b> The national drug code type using the supported enumeration values. <sup>2</sup>                                                                                                               |
|              |  |  |  |  | cmn:LotNumber      | 0...1<br>0/*  | String  | The lot or batch code for the items to be picked (if available) in an alphanumeric string. <sup>3</sup>                                                                                                         |
|              |  |  |  |  | cmn:ExpirationDate | 0...1<br>1/*  | Date    | Expiration date of the serialized item, in YYYY-MM-DD format.                                                                                                                                                   |
|              |  |  |  |  | cmn:Quantity       | 1...1<br>1/*  | Integer | <b>Required.</b> The quantity of items at the EACH (unit) level of the item code and lot if specified to be picked. Quantity must be greater than zero if <b>cmn:IsSerialized</b> = <b>false</b> . <sup>4</sup> |
|              |  |  |  |  | cmn:UnitPrice      | 0...1<br>-    | Decimal | <b>Required.</b> if:<br>Unit price of item. <sup>5</sup>                                                                                                                                                        |
|              |  |  |  |  | @currencyCode      | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format.<br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                        |
|              |  |  |  |  | cmn:VAT            | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>6</sup>                                                                                                                                                                          |
|              |  |  |  |  | @currencyCode      | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>7</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                           |
|              |  |  |  |  | cmn:GrossPrice     | 0...1<br>0/*  | Decimal | Price including unit price and all taxes and fees. <sup>8</sup>                                                                                                                                                 |
|              |  |  |  |  | @currencyCode      | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>9</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                           |

<sup>1</sup>0069-4220-66<sup>2</sup>US\_NDC442<sup>3</sup>A12345<sup>4</sup>480<sup>5</sup>50.34<sup>6</sup>152.22<sup>7</sup>USD<sup>8</sup>45.67<sup>9</sup>USD

| Data Element |  |  |                |          |                               | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|----------------|----------|-------------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                |          | cmn:IsSerialized              | 0...1<br>-    | Boolean | Indicates if item is not serialized. If omitted, defaults to <b>true</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |                |          | cmn:TransactionIdentifier     | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |                |          | @type                         | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type.<br>Valid values: <ul style="list-style-type: none"> <li>• <b>DESTRUCTION</b></li> <li>• <b>INVOICE</b></li> <li>• <b>NOTAFISCALELETRONICA</b></li> <li>• <b>OTHER</b></li> <li>• <b>PO</b></li> <li>• <b>RETURN</b></li> </ul>                                                                                                                                                                                                                                                            |
|              |  |  |                |          | @date                         | 0...1<br>0/*  | Date    | <b>Required.</b> The date of the transaction in XML YYYY-MM-DD format. This value is used for regulatory reporting of the transaction date. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | cmn:SenderInfo |          |                               | 0...1<br>-    | -       | <b>Required.</b><br>This message contains information about the supply chain partner that is sending the return shipment. The FromBusinessParty and ShipFromLocation elements determine whether to use master data lookup to populate the address, license, and contact elements. Only one of FromBusinessParty or ShipFromLocation elements may be present at once.                                                                                                                                                                        |
|              |  |  |                | choice%1 |                               | 0...1<br>-    | Choice  | Option 1 within choice%1 of cmn:SenderInfo contains only the FromBusinessPartyLookupId (in this case, TraceLink will populate all of the FromBusinessPartyInfo field data based on company master data lookup). Populate this element <i>only</i> if no master data lookup is desired. Option 2 within choice%1 of cmn:SenderInfo contains full FromBusinessPartyInfo business address field data that is populated by the customer directly in the interface. Populate this element fully <i>only</i> if no master data lookup is desired. |
|              |  |  |                |          | cmn:FromBusinessPartyLookupId | 0...1<br>0/*  | String  | Option 1 for SenderInfo group. The FromBusinessPartyLookupId is a look-up identifier associated with the sold from business entity from the provided enumeration list. Use this value                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>true<sup>2</sup>PO303005<sup>3</sup>2019-03-30

| Data Element |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|----------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                            |               |        | 1<br><br> This field is optional, but may be used for master data lookup in TraceLink. An error is thrown if both cmn:FromBusinessPartyLookupId and cmn:FromBusinessPartyInfo are populated.                                                                                                                         |
|              |  |  |  | @type                      | 1...1<br>1/*  | String | <b>Required.</b> The type of the sold from business entity identifier. See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                      |
|              |  |  |  | cmn:FromBusinessPartyInfo  | 0...1<br>1/*  | -      | <b>Conditionally required</b> if cmn:SenderInfo is present, but cmn:FromBusinessPartyLookupId is not present. This is option 2 within the SenderInfo field. This field contains full FromBusinessPartyInfo business address field data that will be populated by the customer directly in the interface. Populate this element fully only if no master data look-up is desired.                         |
|              |  |  |  | cmn:BusinessId             | 1...*<br>1/*  | String | <b>Required.</b> Identifier associated with either the sold from business entity or the sold to business entity. This value is mandatory for regulatory reporting. <sup>2</sup>                                                                                                                                                                                                                         |
|              |  |  |  | @type                      | 1...1<br>1/*  | String | <b>Required.</b> The business id type. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.<br><br> Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> |
|              |  |  |  | cmn:BusinessClassification | 0...1<br>0/*  | String | <b>Conditionally required :</b> <ul style="list-style-type: none"> <li>For Argentina.</li> <li>If cmn:ShipToCountryCode = KR and cmn:ReceiptDistributionType = INCOUNTRYRETURN.</li> </ul> This field classifies the business type of the TraceLink customer or trading partner. See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                      |

<sup>1</sup>13655<sup>2</sup>8888882028677

| Data Element |  |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|-------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | BusinessInfo      | 0...1<br>-    | -      | <b>Conditionally required</b> for the US: Provide all required child data elements. Populated with the business name and address of the sold from business entity.                                                                                                                          |
|              |  |  |  |  | cmn:BusinessName  | 1...1<br>1/*  | String | <b>Required.</b> The business name of the TraceLink Customer or Trading Partner. <sup>1</sup>                                                                                                                                                                                               |
|              |  |  |  |  | cmn:Street1       | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> . <sup>2</sup>                                                                                                                                                                   |
|              |  |  |  |  | cmn:Street2       | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> . <sup>3</sup>                                                                                                                                                                                   |
|              |  |  |  |  | cmn:City          | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> . <sup>4</sup>                                                                                                                                                                                                |
|              |  |  |  |  | cmn:Village       | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                        |
|              |  |  |  |  | cmn:HouseNumber   | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                                                    |
|              |  |  |  |  | cmn:Township      | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:District      | 0...1<br>0/*  | String | District Code. <sup>5</sup><br><br>ⓘ Must be a 3-digit numeric code.                                                                                                                                                                                                                        |
|              |  |  |  |  | cmn:StateOrRegion | 1...1<br>1/*  | String | <b>Required.</b> The standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> . <sup>6</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |

<sup>1</sup>Kendall Pharma<sup>2</sup>300 Trade Center<sup>3</sup>Suite 7690<sup>4</sup>Woburn<sup>5</sup>002<sup>6</sup>MA

| Data Element |  |  |  |          |                              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|----------|------------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          | cmn:PostalCode               | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> . <sup>1</sup>                                                                                                                                                              |
|              |  |  |  |          | cmn:Country                  | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . <sup>2</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                   |
|              |  |  |  |          | cmn:CorporateFax             | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                           |
|              |  |  |  |          | cmn:AddressObjectGUID        | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F.                           |
|              |  |  |  |          | cmn:HouseGUID                | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F.                     |
|              |  |  |  |          | cmn:TaxRegistrationCode      | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                        |
|              |  |  |  |          | cmn:PremisesCode             | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                         |
|              |  |  |  | choice%2 |                              | 0...1<br>-    | Choice | Choice of either <b>cmn:ShipFromLocationLookupId</b> or <b>cmn:ShipFromLocationInfo</b> . Only one can be present.                                                                                                                                                            |
|              |  |  |  |          | cmn:ShipFromLocationLookupId | 0...1<br>1/*  | String | Option 1 for the SenderInfo group . This field is a partner identifier (e.g. GLN, DUNS) which triggers the look-up of the partner's address information in TraceLink (the master data). This information then populates the details in the ShipFromLocationInfo. <sup>3</sup> |
|              |  |  |  | @type    |                              | 1...1<br>1/*  | String | <b>Required.</b> The location type.<br>See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                                            |

<sup>1</sup>01801<sup>2</sup>US<sup>3</sup>1056231

| Data Element |  |  |  |                          |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--------------------------|------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:ShipFromLocationInfo |                  | 0...1<br>-    | -      | <b>Conditionally required</b> for the US or if <b>cmn:ShipFromLocationLookupId</b> is not populated. This is Option 2 for the SenderInfo group. The full business information associated with the ship-from location is provided directly. Countries outside the U.S. do not track sold from business and ship-from location separately.                                                      |
|              |  |  |  |                          | cmn:FacilityId   | 1...*<br>1/*  | String | <b>Required.</b> This field is populated with either the ship-from Location Identifier or the ship-to location identifier. <sup>1</sup> <div> <i>ⓘ</i> For the for US: Provide a DEA, GLN, HIN, or SGLN identifier associated with the ship-from location, and provide the SGLN for the location where the event occurred if not already provided as the selected location identifier. </div> |
|              |  |  |  |                          | @type            | 1...1<br>1/*  | String | <b>Required.</b> The facility type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. <div> <i>⚠</i> Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div>                                                            |
|              |  |  |  | cmn:LocationInfo         |                  | 0...1<br>-    | String | <b>Conditionally required</b> for the US. This field is populated with the business name and address of the business entity. This field is contingent on if this field is associated with the ShipFromLocationInfo or ShipToLocationInfo element.                                                                                                                                             |
|              |  |  |  |                          | cmn:BusinessName | 1...1<br>1/*  | String | <b>Required.</b> The business name of the ship-from business entity.                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |                          | cmn:Street1      | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                  |
|              |  |  |  |                          | cmn:Street2      | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |                          | cmn:City         | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>888882028655

| Data Element |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|-------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:Village             | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                        |
|              |  |  |  |  | cmn:HouseNumber         | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                    |
|              |  |  |  |  | cmn:Township            | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:District            | 0...1<br>0/*  | String | District Code.<br><br> Must be a 3-digit numeric code.                                                                                                                   |
|              |  |  |  |  | cmn:StateOrRegion       | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region of the company specified in <b>cmn:BusinessName</b> . Use the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code.                                                       |
|              |  |  |  |  | cmn:PostalCode          | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                         |
|              |  |  |  |  | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> The country code of the company indicated in <b>cmn:BusinessName</b> . See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                           |
|              |  |  |  |  | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                         |
|              |  |  |  |  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F.       |
|              |  |  |  |  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                      |
|              |  |  |  |  | cmn:PremisesCode        | 0...1         | String | Identifier representing a physical area within the company location (e.g. a location's second                                                                                                                                                               |



| Data Element |  |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|-------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                   |               |        | floor).                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | cmn:LicenseNumber | 0...*<br>0/*  | String | <b>Conditionally required</b> for the US. The LicenseNumber field is populated with the license number of the ship-to or ship-from facility. This element may be repeated to include as many license numbers as required (e.g. state and federal license). <sup>1</sup>                                                                                        |
|              |  |  |  |  | @state            | 0...1<br>0/*  | String | The state or region in which the trading partner is licensed, using the standard two-letter abbreviation specified in ISO 3166-2:1998 country sub-division code. <sup>2</sup>                                                                                                                                                                                  |
|              |  |  |  |  | @agency           | 0...1<br>0/*  | String | This attribute is used to give additional context to the LicenseNumber field. It indicates the agency that granted the license to the facility (e.g. Florida DOH, NABP). <sup>3</sup>                                                                                                                                                                          |
|              |  |  |  |  | cmn:ContactInfo   | 0...1<br>-    | String | The ContactInfo field contains contact information for use by downstream trading partners to authenticate (i.e. verify) the transaction information recorded on the pedigree with the sender party. This field must contain a name and telephone number but could also include an individual's title, email and/or URL. Do not include for Ship-From Location. |
|              |  |  |  |  | cmn:Name          | 0...1<br>0/*  | String | <b>Required.</b> The name of the contact department or individual at the designated company. <sup>4</sup>                                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:Title         | 0...1<br>0/*  | String | The title refers to the individual's job title who is indicated in the Name field. Title information is optional within <b>cmn:ContactInfo</b> . <sup>5</sup>                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Telephone     | 1...1<br>1/*  | String | <b>Required.</b> The phone number of the contact department or individual at the designated company. This value must begin with the "+" character followed by the Country Calling Code. <sup>6</sup>                                                                                                                                                           |
|              |  |  |  |  | cmn:Email         | 0...1<br>0/*  | String | The email address of the contact department or individual at the designated company. Should be included if available. <sup>7</sup>                                                                                                                                                                                                                             |
|              |  |  |  |  | cmn:Url           | 0...1<br>0/*  | String | URL information is optional within <b>cmn:ContactInfo</b> . The URL refers to the designated company's web address that facilitates authentication. <sup>8</sup>                                                                                                                                                                                               |

<sup>1</sup>8888800003604<sup>2</sup>TN<sup>3</sup>BOP<sup>4</sup>Customer Service<sup>5</sup>Customer Service Representative<sup>6</sup>+1-781-555-562<sup>7</sup>support@kendallpharma.com<sup>8</sup>www.KendallPharma.com

| Data Element |  |  |                  |                             |                | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|------------------|-----------------------------|----------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:ReceiverInfo |                             |                | 0...1<br>-    | String | <b>Required.</b><br>Information about the supply chain partner that is receiving the shipment. ReceiverInfo contains an XML Choice element on the ToBusinessPartyLookupId and ShipToLocationLookupId that decide whether master data look-up is used to populate the address, license, and contact elements.                                                                                                                                                                                                                                  |
|              |  |  |                  | choice%1                    |                | 0...1<br>-    | Choice | Option 1 within choice%1 of ReceiverInfo contains only the ToBusinessPartyLookupId (in this case TraceLink populates all of the ToBusinessPartyInfo field data based on company master data lookup). Populate this element <i>only</i> if master data lookup is desired.<br>Option 2 within choice%1 of ReceiverInfo contains full ToBusinessPartyInfo business address field data that is populated by the customer directly in the interface. Populate this element <i>fully</i> if no master data lookup is desired.                       |
|              |  |  |                  | cmn:ToBusinessPartyLookupId |                | 0...1<br>0/*  | String | Option 1 for ReceiverInfo message. A look-up identifier associated with the sold to business entity from the provided enumeration list. Use this value as the look-up key in master data to populate the details in ToBusinessPartyInfo. <sup>1</sup><br><br> This field is optional, but may be used for master data lookup in TraceLink. An error is thrown if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated. |
|              |  |  |                  |                             | @type          | 1...1<br>1/*  | String | <b>Required.</b> The type of the sold to business entity identifier. See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |                  | cmn:ToBusinessPartyInfo     |                | 0...1<br>-    | String | <b>Conditionally required</b> if the <b>cmn:ReceiverInfo</b> group is populated, but <b>cmn:ToBusinessPartyLookupId</b> is not populated. Option 2 for ReceiverInfo group. This field is populated with the full business information associated with the sold to business entity.                                                                                                                                                                                                                                                            |
|              |  |  |                  |                             | cmn:BusinessId | 1...*<br>1/*  | String | <b>Required.</b> This field is populated with the full business information associated with the sold to business entity. This value is mandatory for regulatory reporting. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |                  |                             | @type          | 1...1<br>1/*  | String | <b>Required.</b> The business id type. See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.<br><br> Only one of the following values may be used per message:                                                                                                                                                                                                                                                                |

<sup>1</sup>3333331013655<sup>2</sup>8888882028677

| Data Element |  |  |  |  |                            |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|----------------------------|------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                            |                  |               |        | <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul>                                                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:BusinessClassification |                  | 0...1<br>1/*  | String | <p><b>Conditionally required:</b></p> <ul style="list-style-type: none"> <li>For Argentina.</li> <li>If <b>cmn:shipToCountryCode</b> = <b>KR</b> and <b>ReceiptDistributionType</b> = <b>INCOUNTRYRETURN</b>.</li> </ul> <p>This field classifies the business type of the receiving business entity.<br/>See the <a href="#">BusinessClassification</a> enumeration list for valid values.</p> |
|              |  |  |  |  | cmn:BusinessInfo           |                  | 0...1<br>0/*  | String | Populated with the business name and address of the sold to business entity.                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |                            | cmn:BusinessName | 1...1<br>1/*  | String | <b>Required.</b> The name of the receiving business entity.                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |                            | cmn:Street1      | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |                            | cmn:Street2      | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |                            | cmn:City         | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |                            | cmn:Village      | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |                            | cmn:HouseNumber  | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                                                                                                                                                        |
|              |  |  |  |  |                            | cmn:Township     | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |                            | cmn:District     | 0...1<br>0/*  | String | District Code.                                                                                                                                                                                                                                                                                                                                                                                  |

| Data Element |  |  |  |          |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                           |
|--------------|--|--|--|----------|----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |                            |               |        |  Must be a 3-digit numeric code.                                                                                                                                   |
|              |  |  |  |          | cmn:StateOrRegion          | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> .                                                                  |
|              |  |  |  |          | cmn:PostalCode             | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                   |
|              |  |  |  |          | cmn:Country                | 1...1<br>1/*  | String | <b>Required.</b> Standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . See the <a href="#">ISOCountryCode</a> enumeration list for valid values.  |
|              |  |  |  |          | cmn:CorporateFax           | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                   |
|              |  |  |  |          | cmn:AddressObjectGUID      | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br> Maximum 36 characters, using the digits 0-9 and letters A-F.       |
|              |  |  |  |          | cmn:HouseGUID              | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br> Maximum 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |          | cmn:TaxRegistrationCode    | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                |
|              |  |  |  |          | cmn:PremisesCode           | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                 |
|              |  |  |  | choice%2 |                            | 1...1<br>-    | Choice | Can choose either <b>cmn:ShipToLocationLookupId</b> or <b>cmn:ShipToLocationInfo</b> ; cannot choose both. No error thrown if none are present.                                                                                                       |
|              |  |  |  |          | cmn:ShipToLocationLookupId | 0...1<br>0/*  | String | Option 1 for ReceiverInfo. A look-up identifier associated with the ship-to location using the provided enumeration list. This value will be used as the look-up key in master data to populate the details in ShipToLocationInfo.                    |
|              |  |  |  | @type    |                            | 1...1<br>1/*  | String | <b>Required.</b> ship-to location type. See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                   |

| Data Element |  |  |  |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:ShipToLocationInfo | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:ShipToLocationLookupId</b> is not present. Option 2 for ReceiverInfo group. This field is populated with the full business information associated with the ship-to location, which is provided directly.                                                                                                                                                                 |
|              |  |  |  | cmn:FacilityId         | 1...*<br>1/*  | String | <b>Required.</b> This field is populated with either the ship-from Location Identifier or the ship-to location identifier. <sup>1</sup> <div>  For the US: Provide a DEA, GLN, HIN, or SGLN identifier associated with the ship-to location. </div>                                                                           |
|              |  |  |  | @type                  | 1...1<br>1/*  | String | <b>Required.</b> The facility id type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> |
|              |  |  |  | cmn:LocationInfo       | 0...1<br>1/*  | String | <b>Conditionally required</b> for the US. This field is populated with the business name and address of the business entity.                                                                                                                                                                                                                                                                                     |
|              |  |  |  | cmn:BusinessName       | 1...1<br>1/*  | String | <b>Required.</b> The name of the receiving business entity.                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | cmn:Street1            | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | cmn:Street2            | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | cmn:City               | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | cmn:Village            | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>8888882.02865.0

| Data Element |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|-------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:HouseNumber         | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                    |
|              |  |  |  |  | cmn:Township            | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:District            | 0...1<br>0/*  | String | District Code.<br><br> Must be a 3-digit numeric code.                                                                                                                   |
|              |  |  |  |  | cmn:StateOrRegion       | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> .                                                                        |
|              |  |  |  |  | cmn:PostalCode          | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                         |
|              |  |  |  |  | cmn:Country             | 1...1<br>1/*  | String | <b>Required.</b> Standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . See the <a href="#">ISOCountryCode</a> enumeration list for valid values.        |
|              |  |  |  |  | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                         |
|              |  |  |  |  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F.         |
|              |  |  |  |  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                      |
|              |  |  |  |  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                       |

| Data Element |  |  |  |         |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|---------|-------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |         | cmn:LicenseNumber | 0...*<br>0/*  | String | <b>Conditionally required</b> for the US. The LicenseNumber field is populated with the license number of the ship-to or ship-from facility. This element may be repeated to include as many license numbers as required (such as, state and federal license).                                                                                                                                |
|              |  |  |  |         | @state            | 0...1<br>0/*  | String | Use the standard two-letter abbreviation specified in ISO 3166-2:1998 country sub-division code. This attribute is used to give additional context to the LicenseNumber field. It indicates the state or region in which the trading partner is licensed.                                                                                                                                     |
|              |  |  |  |         | @agency           | 0...1<br>0/*  | String | This attribute is used to give additional context to the LicenseNumber field. It indicates the agency that granted the license to the facility (e.g. Florida DOH, NABP).                                                                                                                                                                                                                      |
|              |  |  |  |         | cmn:ContactInfo   | 0...1<br>-    | String | This element contains the contact information to be used by downstream trading partners to verify the message's information. This information may be associated with the fromBusiness, shipFromLocation, toBusiness, and/or shipToLocation elements.                                                                                                                                          |
|              |  |  |  |         | cmn:Name          | 0...1<br>0/*  | String | The name field is an attribute of <b>cmn:ContactInfo</b> . It indicates the name of either an individual or department that represents the fromBusiness entity, the shipFromLocation entity, the toBusiness entity, and/or the shipToLocation entity, contingent on which entity the attribute is affixed to.                                                                                 |
|              |  |  |  |         | cmn:Title         | 0...1<br>0/*  | String | The title field is an optional attribute of <b>cmn:ContactInfo</b> . It indicates the title of the person indicated in the name field of either the fromBusiness entity, the shipFromLocation entity, the toBusiness entity, and/or the shipToLocation entity, contingent on which entity the attribute is affixed to.                                                                        |
|              |  |  |  |         | cmn:Telephone     | 1...1<br>1/*  | String | <b>Required.</b> This value must begin with the + character followed by the Country Calling Code. The telephone field is an optional attribute of <b>cmn:ContactInfo</b> . It indicates the telephone number of either the fromBusiness entity, the shipFromLocation entity, the toBusiness entity, and/or the shipToLocation entity, contingent on which entity the attribute is affixed to. |
|              |  |  |  |         | cmn:Email         | 0...1<br>0/*  | String | The email field is a recommended attribute of <b>cmn:ContactInfo</b> . It indicates the email address of either the fromBusiness entity, the shipFromLocation entity, the toBusiness entity, and/or the shipToLocation entity, contingent on which entity the attribute is affixed to.                                                                                                        |
|              |  |  |  |         | cmn:Url           | 0...1<br>0/*  | String | The url field is an optional attribute of <b>cmn:ContactInfo</b> . It indicates the website of either the fromBusiness entity, the shipFromLocation entity, the toBusiness entity and/or the shipToLocation entity, contingent on which entity the url field is affixed to.                                                                                                                   |
|              |  |  |  |         | cmn:CarrierInfo   | 0...*<br>-    | -      | Information about the transportation partner that is transporting the shipment.                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | choice1 |                   | 1...1<br>-    | Choice | <b>Required.</b> Must choose populate <b>cmn:CarrierBusinessPartyLookupId</b> or <b>cmn:CarrierBusinessPartyInfo</b> .                                                                                                                                                                                                                                                                        |

| Data Element |  |  |  |                                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|----------------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:CarrierBusinessPartyLookupId | 0...1<br>1/*  | String | <b>Conditionally required</b> if cmn:CarrierBusinessPartyInfo is not populated. This is Option 1 for cmn:CarrierInfo . This value indicates the look-up identifier associated with the Carrier entity from the provided enumeration list. This value will be used as the look-up key in master data to populate the details in CarrierBusinessPartyInfo. <sup>1</sup>                                      |
|              |  |  |  | @type                            | 1...1<br>1/*  | String | <b>Required.</b> The business party type.<br>See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                   |
|              |  |  |  | cmn:CarrierBusinessPartyInfo     | 0...1<br>-    | -      | <b>Conditionally required</b> for Brazil, or if cmn:CarrierBusinessPartyLookupId is not populated. Option 2 for cmn:CarrierInfo choice%1 group. The full business information associated with the transportation carrier business entity is provided.                                                                                                                                                      |
|              |  |  |  | cmn:BusinessId                   | 1...*<br>1/*  | String | <b>Required.</b> The identifier associated with the transport carrier business entity. This value is mandatory for regulatory reporting.<br><br> For Brazil: provide the BR_CNPJ, BR_CPF, BR_CNES or BR_PROF_REG, and BR_CNPJ is the value preferred by ANVISA if the company has one.                                  |
|              |  |  |  | @type                            | 1...1<br>1/*  | String | <b>Required.</b> The business id type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.<br><br> Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> |
|              |  |  |  | cmn:BusinessClassification       | 0...1<br>0/*  | String | This field classifies the business type of the carrier party.<br>Valid values: <ul style="list-style-type: none"> <li>DISTRIBUTOR</li> <li>HEALTHCARE</li> <li>LOGISTICS</li> <li>MANUFACTURER</li> <li>PHARMACY</li> </ul>                                                                                                                                                                                |

<sup>1</sup>00.000.000/0001-00



| Data Element |  |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                                          |
|--------------|--|--|--|--|-------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                   |               |        | <ul style="list-style-type: none"> <li>• WHOLESALER</li> </ul>                                                                                                                                                                                       |
|              |  |  |  |  | cmn:BusinessInfo  | 0...1<br>-    | -      | Populated with the business name and address of the transportation carrier business entity.                                                                                                                                                          |
|              |  |  |  |  | cmn:BusinessName  | 1...1<br>1/*  | String | <b>Required.</b> The name of the receiving business entity.                                                                                                                                                                                          |
|              |  |  |  |  | cmn:Street1       | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                         |
|              |  |  |  |  | cmn:Street2       | 0...1<br>0/*  | String | The second line of the street address for the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                         |
|              |  |  |  |  | cmn:City          | 1...1<br>1/*  | String | <b>Required.</b> The city of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                                      |
|              |  |  |  |  | cmn:Village       | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                 |
|              |  |  |  |  | cmn:HouseNumber   | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .             |
|              |  |  |  |  | cmn:Township      | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                |
|              |  |  |  |  | cmn:District      | 0...1<br>0/*  | String | District Code.<br><div>  Must be a 3-digit numeric code.         </div>                                                                                         |
|              |  |  |  |  | cmn:StateOrRegion | 1...1<br>1/*  | String | <b>Required.</b> Two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. The state, province, or region of the company specified in <b>cmn:BusinessName</b> .                                                                 |
|              |  |  |  |  | cmn:PostalCode    | 1...1<br>1/*  | String | <b>Required.</b> The zip or other postal code of the company indicated in <b>cmn:BusinessName</b> .                                                                                                                                                  |
|              |  |  |  |  | cmn:Country       | 1...1<br>1/*  | String | <b>Required.</b> Standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. The country code of the company indicated in <b>cmn:BusinessName</b> . See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  | cmn:CorporateFax  | 0...1         | String | Company fax number.                                                                                                                                                                                                                                  |

| Data Element |  |                           |            |                  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|---------------------------|------------|------------------|-------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                           |            |                  |                         |               |        |                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |                           |            |                  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><div> Maximum 36 characters, using the digits 0-9 and letters A-F.</div>                                                                                                                                         |
|              |  |                           |            |                  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS).<br><div> Maximum 36 characters, using the digits 0-9 and letters A-F.</div>                                                                                                                                   |
|              |  |                           |            |                  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                                                                                                                             |
|              |  |                           |            |                  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                                                                                                                              |
|              |  | cmn:WarehouseOperatorName |            |                  |                         | 0...1<br>0/*  | String | <b>Conditionally required</b> for China. This field indicates the name of the person responsible for warehouse operations. This element can be communicated at any time (e.g. with, before, or after the order details or picked items have been communicated). <sup>1</sup>                                                                                                                       |
|              |  | som:AddReceivedItems      |            |                  |                         | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>som:RemoveReceivedItems</b> is not populated. The <b>som:AddReceivedItems</b> group is populated with the list of serial numbers for the outermost handling units received for this order. TraceLink will look up the child aggregations of the serial numbers provided in the list and update the container and all sub-child items with the received status. |
|              |  |                           | cmn:Serial |                  |                         | 1...*<br>1/*  | String | <b>Required.</b> This attribute identifies the received serial numbers included in the message and their format. <sup>2</sup>                                                                                                                                                                                                                                                                      |
|              |  |                           |            | @format          |                         | 0...1<br>0/*  | String | <b>Required.</b> The format of the serial number. See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                |
|              |  |                           |            | @orderItemNumber |                         | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                                                                                                                        |
|              |  | som:RemoveReceivedItems   |            |                  |                         | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>som:AddReceivedItems</b> is not populated. The                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>John Smith<sup>2</sup>015088202501033321100000060001

| Data Element |  |  |            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |            |               |        | <b>som:RemoveReceivedItems</b> group is populated with the list of serial numbers that were previously reported as received for this delivery, but have been unreceived (e.g. will not be a part of the order). TraceLink will look up the child aggregations of the serial numbers provided in the list and update the container and all sub-child items with the available status and disassociate it from the order. |
|              |  |  | cmn:Serial | 1...*<br>1/*  | String | <b>Required.</b> This attribute identifies the unreceived serial numbers included in the transaction and their format.                                                                                                                                                                                                                                                                                                  |
|              |  |  | @format    | 0...1<br>0/*  | String | <b>Required.</b> The format of the serial number.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                  |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMReceiptMessage xmlns="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager" xmlns:cmn="urn:tracelink:mapper:sl:commontypes"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" >
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>88888882028655</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>88888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>20180612063132</cmn:FileControlNumber>
    <cmn:FileDate>2018-06-12</cmn:FileDate>
    <cmn:FileTime>06:31:32Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <cmn:LocationId>412333444</cmn:LocationId>
    <cmn:DeliveryNumber>4610044</cmn:DeliveryNumber>
    <cmn:DeliveryCompleteFlag>true</cmn:DeliveryCompleteFlag>
    <cmn:RegisterUnknownSNs>false</cmn:RegisterUnknownSNs>
    <som:OrderDetails>
      <cmn:CorrectiveReceipt>true</cmn:CorrectiveReceipt>
      <cmn:OriginalDeliveryNumber>123456</cmn:OriginalDeliveryNumber>
      <cmn:EntryPort></cmn:EntryPort>
      <cmn:ExitPort></cmn:ExitPort>
      <cmn:TransactionIdentifier type="BOL" date="2018-06-12">BOL-111010</cmn:TransactionIdentifier>
      <cmn:TransactionIdentifier type="PO" date="2018-06-12">PO303005</cmn:TransactionIdentifier>
      <cmn:TransactionIdentifier type="INVOICE" date="2018-06-12">INV9978</cmn:TransactionIdentifier>
    </som:OrderDetails>
  </som:MessageBody>
</som:SOMReceiptMessage>
```

```

<cmn:TransactionIdentifier type="ASN" date="2018-06-12">ASN53014</cmn:TransactionIdentifier>
<cmn:TransactionDate>2018-06-12</cmn:TransactionDate>
<cmn:TransactionTime>06:30:30</cmn:TransactionTime>
<cmn:ShipToCountryCode>BR</cmn:ShipToCountryCode>
<cmn:ShipFromCountryCode>US</cmn:ShipFromCountryCode>
<cmn:ReceiptDistributionType>IMPORTPURCHASE</cmn:ReceiptDistributionType>
<cmn:TransferWithoutShipment>false</cmn:TransferWithoutShipment>
<cmn:SupplyType>PatientDistribution</cmn:SupplyType>
<cmn:ContractType>PrivateContract</cmn:ContractType>
<cmn:Comments>Purchase for import</cmn:Comments>
<cmn:ContractNumber>C110</cmn:ContractNumber>
<cmn:FundingSource>OwnFunds</cmn:FundingSource>
<cmn:OrderItemList>
  <cmn:OrderItem>
    <cmn:OrderItemNumber>190</cmn:OrderItemNumber>
    <cmn:InternalMaterialCode>133661</cmn:InternalMaterialCode>
    <cmn:LotNumber>PPP555</cmn:LotNumber>
    <cmn:ExpirationDate>2020-06-12</cmn:ExpirationDate>
    <cmn:Quantity>500</cmn:Quantity>
    <cmn:UnitPrice currencyCode="USD">50.00</cmn:UnitPrice>
    <cmn:IsSerialized>true</cmn:IsSerialized>
    <cmn:VAT currencyCode="USD">50.00</cmn:VAT>
    <cmn:GrossPrice currencyCode="USD">100.00</cmn:GrossPrice>
    <cmn:IsSerialized>false</cmn:IsSerialized>
    <cmn:TransactionIdentifier type="PO" date="2018-06-12">PO1078</cmn:TransactionIdentifier>
  </cmn:OrderItem>
</cmn:OrderItemList>
<cmn:SenderInfo>
  <cmn:FromBusinessPartyInfo>
    <cmn:BusinessId type="DEA">712333444</cmn:BusinessId>
    <cmn:BusinessClassification>MANUFACTURER</cmn:BusinessClassification>
    <cmn:BusinessInfo>
      <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>
      <cmn:Street1>10 Welsh St</cmn:Street1>
      <cmn:City>Malden</cmn:City>
      <cmn:Village></cmn:Village>
      <cmn:HouseNumber></cmn:HouseNumber>
      <cmn:Township></cmn:Township>
      <cmn:StateOrRegion>MA</cmn:StateOrRegion>
    </cmn:BusinessInfo>
  </cmn:FromBusinessPartyInfo>
</cmn:SenderInfo>

```

```

        <cmn:PostalCode>02148</cmn:PostalCode>
        <cmn:Country>US</cmn:Country>
        <cmn:CorporateFax></cmn:CorporateFax>
        <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>
        <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
        <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
        <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:BusinessInfo>
</cmn:FromBusinessPartyInfo>
<cmn:ShipFromLocationInfo>
    <cmn:FacilityId type="SGLN">9997777.01994.0</cmn:FacilityId>
    <cmn:LocationInfo>
        <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>
        <cmn:Street1>10 Welsh St</cmn:Street1>
        <cmn:City>Malden</cmn:City>
        <cmn:Village></cmn:Village>
        <cmn:HouseNumber></cmn:HouseNumber>
        <cmn:Township></cmn:Township>
        <cmn:StateOrRegion>MA</cmn:StateOrRegion>
        <cmn:PostalCode>02148</cmn:PostalCode>
        <cmn:Country>US</cmn:Country>
        <cmn:CorporateFax></cmn:CorporateFax>
        <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>
        <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
        <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
        <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:LocationInfo>
</cmn:ShipFromLocationInfo>
</cmn:SenderInfo>
<cmn:ReceiverInfo>
    <cmn:ToBusinessPartyLookupId type="GLN">8811891013778</cmn:ToBusinessPartyLookupId>
    <cmn:ShipToLocationInfo>
        <cmn:FacilityId type="GLN">8811891013778</cmn:FacilityId>
        <cmn:FacilityId type="DUNS">710040867</cmn:FacilityId>
        <cmn:LocationInfo>
            <cmn:BusinessName>Wilbur Pharmaceutical Imports</cmn:BusinessName>
            <cmn:Street1>154 Broadway</cmn:Street1>
            <cmn:City>Somerville</cmn:City>
            <cmn:Village></cmn:Village>

```

```

    <cmn:HouseNumber></cmn:HouseNumber>
    <cmn:Township></cmn:Township>
    <cmn:StateOrRegion>MA</cmn:StateOrRegion>
    <cmn:PostalCode>02145</cmn:PostalCode>
    <cmn:Country>US</cmn:Country>
    <cmn:CorporateFax></cmn:CorporateFax>
    <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000155</cmn:AddressObjectGUID>
    <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbe</cmn:HouseGUID>
    <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
    <cmn:PremisesCode></cmn:PremisesCode>
  </cmn:LocationInfo>
  <cmn:LicenseNumber state="MA" agency="BORP">773BT8</cmn:LicenseNumber>
  <cmn:ContactInfo>
    <cmn:Name>Customer Service</cmn:Name>
    <cmn:Telephone>+1-781-555-5624</cmn:Telephone>
    <cmn:Email>support@wilburpharma.com</cmn:Email>
  </cmn:ContactInfo>
</cmn:ShipToLocationInfo>
</cmn:ReceiverInfo>
<cmn:CarrierInfo>
  <cmn:CarrierBusinessPartyInfo>
    <cmn:BusinessId type="DEA">712333444</cmn:BusinessId>
    <cmn:BusinessClassification>MANUFACTURER</cmn:BusinessClassification>
    <cmn:BusinessInfo>
      <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>
      <cmn:Street1>10 Welsh St</cmn:Street1>
      <cmn:City>Malden</cmn:City>
      <cmn:Village></cmn:Village>
      <cmn:HouseNumber></cmn:HouseNumber>
      <cmn:Township></cmn:Township>
      <cmn:StateOrRegion>MA</cmn:StateOrRegion>
      <cmn:PostalCode>02148</cmn:PostalCode>
      <cmn:Country>US</cmn:Country>
      <cmn:CorporateFax></cmn:CorporateFax>
      <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>
      <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
      <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
      <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:BusinessInfo>
  </cmn:CarrierBusinessPartyInfo>
</cmn:CarrierInfo>

```

```

        </cmn:CarrierBusinessPartyInfo>
    </cmn:CarrierInfo>
</som:OrderDetails>
<cmn:WarehouseOperatorName>Patrick Murphy</cmn:WarehouseOperatorName>
<som:AddReceivedItems>
    <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="190">010088202501033821100000880001</cmn:Serial>
    <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="190">010088202501033821100000880002</cmn:Serial>
    <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="190">010088202501033821100000880003</cmn:Serial>
    <cmn:Serial format="AI(01)+AI(21)" orderItemNumber="190">010088202501033821100000880051</cmn:Serial>
</som:AddReceivedItems>
</som:MessageBody>
</som:SOMReceiptMessage>

```

## Errors

| Data Element           | Error Message                                                                                                 | Description                                                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>         |                                                                                                               |                                                                                                                                                           |
| choice%1               | Missing mandatory choice. One of InternalMaterialCode OR PackagingItemCode OR CountryDrugCode is required !!! | The error occurs if <b>cmn:InternalMaterialCode</b> , <b>cmn:PackagingItemCode</b> , and <b>cmn:CountryDrugCode</b> are empty or null.                    |
|                        | Only one of InternalMaterialCode OR PackagingItemCode OR CountryDrugCode is required !!!                      | The error occurs if more than one value is provided for <b>cmn:InternalMaterialCode</b> , <b>cmn:PackagingItemCode</b> , and <b>cmn:CountryDrugCode</b> . |
| cmn:BusinessId   @type | Valid carrier business party identifier type is required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                             |
|                        | CarrierBusinessPartyInfo BusinessId is required when ShipToCountry is Brazil !!!                              | The error occurs if <b>cmn:ShipToCountry</b> = <b>BR</b> , but source is empty or null.                                                                   |
|                        | Party type attribute is required when source FromBusinessPartyInfo/BusinessId is populated !!!                | The error occurs if cmn:FromBusinessPartyInfo   <b>cmn:BusinessId</b> is populated, but the source is empty or null.                                      |
|                        | Party type attribute is required when source CarrierBusinessPartyLookupId is populated !!!                    | The error occurs if <b>cmn:CarrierBusinessPartyLookupId</b> is populated, but the source is empty or null.                                                |
|                        | Party type attribute is required when source ToBusinessPartyInfo/BusinessId is populated !!!                  | The error occurs if cmn:ToBusinesspartyInfo   <b>cmn:BusinessId</b> is populated, but the source is empty or null.                                        |

| Data Element                                         | Error Message                                                                                         | Description                                                                                                               |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| cmn:BusinessType   @type                             | Party type attribute is required when source FromBusinessPartyLookupId is populated !!!               | The error occurs if <b>cmn:FromBusinessPartyLookupId</b> is populated, but the source is empty or null.                   |
| cmn:BusinessName                                     | BusinessName is required if FromBusinessPartyInfo is populated !!!                                    | The error occurs if cmn:FromBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.    |
|                                                      | BusinessName is required if ShipToLocationInfo is populated !!!                                       | The error occurs if cmn:ShipToLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.       |
|                                                      | BusinessName is required if ToBusinessPartyInfo is populated !!!                                      | The error occurs if cmn:ToBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.      |
|                                                      | BusinessName is required if ShipFromLocationInfo is populated !!!                                     | The error occurs if cmn:ShipFromLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.     |
|                                                      | Carrier name in source cmn:BusinessName is required if cmn:BusinessInfo is populated !!!              | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |
| cmn:CarrierInfo   <b>cmn:ToBusinessPartyInfo</b>     | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!! | The error occurs if neither <b>cmn:ToBusinessPartyLookupId</b> nor <b>cmn:ToBusinessPartyInfo</b> are populated.          |
|                                                      | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                      | The error occurs if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated.             |
| cmn:CarrierInfo   <b>cmn:ToBusinessPartyLookupId</b> | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!! | The error occurs if neither <b>cmn:ToBusinessPartyLookupId</b> nor <b>cmn:ToBusinessPartyInfo</b> are populated.          |
|                                                      | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                      | The error occurs if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated.             |
| cmn:City                                             | City is required if CarrierBusinessPartyInfo is populated !!!                                         | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |
|                                                      | City is required if ShipFromLocationInfo is populated !!!                                             | The error occurs if cmn:ShipFromLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.     |
|                                                      | City is required if ToBusinessPartyInfo is populated !!!                                              | The error occurs if cmn:ToBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.      |
|                                                      | City is required if ShipToLocationInfo is populated !!!                                               | The error occurs if cmn:ShipToLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.       |
|                                                      | City is required if FromBusinessPartyInfo is populated !!!                                            | The error occurs if cmn:FromBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.    |



| Data Element             | Error Message                                                                                 | Description                                                                                                              |
|--------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| cmn:ContractType         | Valid Contract Type is required !!!                                                           | The error occurs if source is populated, but the entry in the lookup file is invalid.                                    |
| cmn:CountryCode          | Country is required if FromBusinessPartyInfo is populated !!!"                                | The error occurs if cmn:FromBusinessPartyInfo   <b>cmn:BusinessInfois</b> populated, but the source is empty or null.    |
|                          | Country is required if ShipToLocationInfo is populated !!!                                    | The error occurs if cmn:ShipToLocationInfo   <b>cmn:LocationInfois</b> populated, but the source is empty or null.       |
|                          | Country is required if ToBusinessPartyInfo is populated !!!                                   | The error occurs if cmn:ToBusinessPartyInfo   <b>cmn:BusinessInfois</b> populated, but the source is empty or null.      |
|                          | Country is required if ShipFromLocationInfo is populated !!!                                  | The error occurs if cmn:ShipFromLocationInfo   <b>cmn:LocationInfois</b> populated, but the source is empty or null.     |
|                          | Country is required if CarrierBusinessPartyInfo is populated !!!                              | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfois</b> populated, but the source is empty or null. |
| cmn:DeliveryCompleteFlag | DeliveryComplete Flag required!                                                               | The error occurs if the source is empty or null.                                                                         |
|                          | Data Error: DeliveryCompleteFlag occurs fewer times than its minimum number of occurrences    | The error occurs if source is not all lowercase.                                                                         |
| cmn:FacilityId           | FacilityId is required when ShipToLocationInfo is populated !!!                               | The error occurs if <b>cmn:ShipToLocationInfo</b> is populated, but the source is empty or null.                         |
|                          | FacilityId is required when ShipFromLocationInfo is populated !!!                             | The error occurs if <b>cmn:ShipFromLocationInfo</b> is populated, but the source is empty or null.                       |
| cmn:FacilityId   @type   | Party type attribute is required when source ShipToLocationInfo/FacilityId is populated !!!   | The error occurs if <b>cmn:FacilityId</b> is populated, but the source is empty or null.                                 |
|                          | Party type attribute is required when source ShipFromLocationInfo/FacilityId is populated !!! | The error occurs if <b>cmn:FacilityId</b> is populated, but the source is empty or null.                                 |
| cmn:FileControlNumber    | Data Error: FileControlNumber occurs fewer times than its minimum number of occurrences       | The error occurs if the source is empty or null.                                                                         |
| cmn:FileDate             | Data Error: FileDate occurs fewer times than its minimum number of occurrences                | The error occurs if the source is empty or null.                                                                         |
| cmn:FileReceiverNumber   | Data Error: FileReceiverNumber occurs fewer times than its minimum number of occurrences      | The error occurs if the source is empty or null.                                                                         |
| cmn:FileSenderNumber     | Data Error: FileSenderNumber occurs fewer times than its minimum                              | The error occurs if the source is empty or null.                                                                         |

| Data Element                                          | Error Message                                                                                         | Description                                                                                                               |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|                                                       | number of occurrences.                                                                                |                                                                                                                           |
| cmn:FileTime                                          | Data Error: FileTime occurs fewer times than its minimum number of occurrences                        | The error occurs if the source is empty or null.                                                                          |
| cmn:Name                                              | Contact name is required if source contactInfo is populated !!!                                       | The error occurs if the source is empty or null.                                                                          |
| cmn:PackagingItemCode   @type                         | Product type attribute is required when source PackagingItemCode is populated !!!                     | The error occurs if cmn:PackagingItemCode is populated, but the source is empty or null.                                  |
|                                                       | Valid Item Code Type is required !!!                                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                             |
| cmn:PostalCode                                        | PostalCode is required if FromBusinessPartyInfo is populated !!!                                      | The error occurs if cmn:FromBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.    |
|                                                       | PostalCode is required if ShipFromLocationInfo is populated !!!                                       | The error occurs if cmn:ShipFromLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.     |
|                                                       | PostalCode is required if CarrierBusinessPartyInfo is populated !!!                                   | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |
|                                                       | PostalCode is required if ShipToLocationInfo is populated !!!                                         | The error occurs if cmn:ShipToLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.       |
|                                                       | PostalCode is required if ToBusinessPartyInfo is populated !!!                                        | The error occurs if cmn:ToBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.      |
| cmn:Quantity                                          | Source Quantity is required !!!                                                                       | The error occurs if the source is empty or null.                                                                          |
| cmn:ReceiverInfo   <b>cmn:ShipToLocationLookupId</b>  | Only one of ShipToLocationLookupId OR ShipToLocationInfo group is required !!!                        | The error occurs if both <b>cmn:ShipFromLocationLookupId</b> and <b>cmn:ShipFromLocationInfo</b> are populated.           |
| cmn:ReceiverInfo   <b>cmn:ShipToLocationInfo</b>      | Only one of ShipToLocationLookupId OR ShipToLocationInfo group is required !!!                        | The error occurs if both <b>cmn:ShipFromLocationLookupId</b> and <b>cmn:ShipFromLocationInfo</b> are populated.           |
| cmn:ReceiverInfo   <b>cmn:ToBusinessPartyInfo</b>     | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!! | The error occurs if neither <b>cmn:ToBusinessPartyLookupId</b> or <b>cmn:ToBusinessPartyInfo</b> are populated.           |
|                                                       | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                      | The error occurs if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated.             |
| cmn:ReceiverInfo   <b>cmn:ToBusinessPartyLookupId</b> | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!! | The error occurs if neither <b>cmn:ToBusinessPartyLookupId</b> or <b>cmn:ToBusinessPartyInfo</b> are populated.           |

| Data Element                                          | Error Message                                                                          | Description                                                                                                              |
|-------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|                                                       | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!       | The error occurs if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated.            |
| cmn:SenderInfo   <b>cmn:FromBusinessPartyLookupId</b> | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!     | The error occurs if both <b>cmn:ShipFromLocationLookupId</b> and <b>cmn:ShipFromLocationInfo</b> are populated.          |
| cmn:SenderInfo   <b>cmn:FromBusinessPartyInfo</b>     | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!     | The error occurs if both <b>cmn:ShipFromLocationLookupId</b> and <b>cmn:ShipFromLocationInfo</b> are populated.          |
| cmn:ShipFromCountryCode                               | Valid ShipFrom Country Code is required !!!                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.                            |
| cmn:ShipFromLocation   <b>@type</b>                   | Party type attribute is required when source ShipFromLocationLookupId is populated !!! | The error occurs if <b>cmn:ShipFromLocationLookupId</b> is populated, but the source is empty or null.                   |
| cmn:ShipFromLocationInfo                              | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!     | The error occurs if both <b>cmn:ShipFromLocationLookupId</b> and <b>cmn:ShipFromLocationInfo</b> are populated.          |
| cmn:ShipFromLocationLookupId                          | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!     | The error occurs if both <b>cmn:ShipFromLocationLookupId</b> and <b>cmn:ShipFromLocationInfo</b> are populated.          |
| cmn:ShipToLocationLookupId   <b>@type</b>             | Party type attribute is required when source ShipToLocationLookupId is populated !!!   | The error occurs if <b>cmn:ShipToLocationLookupId</b> is populated, but the source is empty or null.                     |
| cmn:ShipToCountryCode                                 | Valid ShipTo Country Code is required !!!                                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                            |
| cmn:StateOrRegion                                     | StateOrRegion is required if ShipToLocationInfo is populated !!!                       | The error occurs if cmn:ShipToLocationInfo   <b>cmn:LocationInfois</b> populated, but the source is empty or null.       |
|                                                       | State or region code is required if ShipFromLocationInfo is populated !!!              | The error occurs if cmn:ShipFromLocationInfo   <b>cmn:LocationInfois</b> populated, but the source is empty or null.     |
|                                                       | State or region code is required if ToBusinessPartyInfo is populated !!!               | The error occurs if cmn:ToBusinessPartyInfo   <b>cmn:BusinessInfois</b> populated, but the source is empty or null.      |
|                                                       | StateOrRegion is required if FromBusinessPartyInfo is populated !!!                    | The error occurs if cmn:FromBusinessPartyInfo   <b>cmn:BusinessInfois</b> populated, but the source is empty or null.    |
|                                                       | State or region code is required if CarrierBusinessPartyInfo is populated !!!          | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfois</b> populated, but the source is empty or null. |
| cmn:Street1                                           | Street1 is required if CarrierBusinessPartyInfo is populated !!!                       | The error occurs if cmn:CarrierBusinessPartyInfo   <b>cmn:BusinessInfois</b> populated, but the source is empty or null. |

| Data Element                                                               | Error Message                                                                                         | Description                                                                                                            |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|                                                                            | Street1 is required if ShipFromLocationInfo is populated !!!                                          | The error occurs if cmn:ShipFromLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.  |
|                                                                            | Street1 is required if ToBusinessPartyInfo is populated !!!                                           | The error occurs if cmn:ToBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null.   |
|                                                                            | Street1 is required if ShipToLocationInfo is populated !!!                                            | The error occurs if cmn:ShipToLocationInfo   <b>cmn:LocationInfo</b> is populated, but the source is empty or null.    |
|                                                                            | Street1 is required if FromBusinessPartyInfo is populated !!!                                         | The error occurs if cmn:FromBusinessPartyInfo   <b>cmn:BusinessInfo</b> is populated, but the source is empty or null. |
| cmn:SupplyType                                                             | Valid Supply Type is required !!!                                                                     | The error occurs if the source is present, but there is no matching entry in the lookup file.                          |
| cmn:Telephone                                                              | Data Error: Telephone occurs fewer times than its minimum number of occurrences.                      | The error occurs if the source is empty or null.                                                                       |
| cmn:ToBusinessPartyLookupId   <b>@type</b>                                 | Party type attribute is required when source ToBusinessPartyLookupId is populated !!!                 | The error occurs if <b>cmn:ToBusinessPartyLookupId</b> is populated, but the source is empty or null.                  |
| cmn:ToBusinessPartyLookupId   cmn:ToBusinessPartyInfo   <b>CarrierInfo</b> | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!! | The error occurs if neither <b>cmn:ToBusinessPartyLookupId</b> nor <b>cmn:ToBusinessPartyInfo</b> are populated.       |
|                                                                            | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!"                     | The error occurs if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated.          |
| cmn:UnitPrice   <b>@currencyCode</b>                                       | Currency code is required if unit price exists !!!                                                    | The error occurs if the source is empty or null.                                                                       |
|                                                                            | Valid ISO currency code is required !!!                                                               | The error occurs if the source is present, but there is no matching entry in the lookup file.                          |
| ShipToLocationLookupId/ShipToLocationInfo (cmn:ReceiverInfo)               | Only one of ShipToLocationLookupId OR ShipToLocationInfo group is required !!!                        | The error occurs if both <b>cmn:ShipToLocationLookupId</b> and <b>cmn:ShipToLocationInfo</b> are populated.            |
| snx:ControlFileHeader                                                      | Data Error: ControlFileHeader occurs fewer times than its minimum number of occurrences.              | The error occurs if the source is empty or null.                                                                       |
| snx:SOMReceiptMessage                                                      | Unable to read input data for business object SOMReceiptMessage due to a XML Error.                   |                                                                                                                        |
| som:OrderDetails                                                           | OrderDetails group is required when AddReceivedItems group is populated !!!                           | The error occurs if <b>AddReceivedItems</b> is populated, but source is empty or null.                                 |
| cmn:ReceiverInfo   <b>cmn:ToBusinessPartyInfo</b>                          | Missing mandatory choice. One of ToBusinessPartyLookupId OR                                           | The error occurs if neither <b>cmn:ToBusinessPartyLookupId</b> nor                                                     |

| Data Element                                                                                                                     | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Description                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                  | ToBusinessPartyInfo group is required !!!                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>cmn:ToBusinessPartyInfo</b> are populated.                                                                               |
|                                                                                                                                  | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                                                                                                                                                                                                                                                                                                                                                                                                                         | The error occurs if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated.               |
| cmn:ReceiverInfo   <b>cmn:ToBusinessPartyLookupId</b>                                                                            | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                                                                                                                                                                                                                                                                                                                                                                                                    | The error occurs if neither <b>cmn:ToBusinessPartyLookupId</b> nor <b>cmn:ToBusinessPartyInfo</b> are populated.            |
|                                                                                                                                  | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                                                                                                                                                                                                                                                                                                                                                                                                                         | The error occurs if both <b>cmn:ToBusinessPartyLookupId</b> and <b>cmn:ToBusinessPartyInfo</b> are populated.               |
| <b>Class 2</b>                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                             |
| addressee, receiving, deliveryNumber                                                                                             | <addressee> district field for <receiving> event for delivery<br><deliveryNumber> must contain exactly 3 numeric digits. (addressee, "receiving", deliveryNumber)                                                                                                                                                                                                                                                                                                                                        | The error occurs if country = <b>IN</b> , but addressee is not a 3-digit numeric code.                                      |
|                                                                                                                                  | <addressee> district field for <receiving> event for delivery<br><deliveryNumber> not found. (addressee, "receiving", deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                    | The error occurs if country = <b>IN</b> , but addressee is empty or null.                                                   |
| CarrierBusinessPartyInfo                                                                                                         | CarrierBusinessPartyInfo lookup failed                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The error occurs if source lookup failed.                                                                                   |
| CarrierBusinessPartyInfo, CarrierBusinessPartyLookupId                                                                           | CarrierBusinessPartyInfo and CarrierBusinessPartyLookupId are both empty                                                                                                                                                                                                                                                                                                                                                                                                                                 | The error occurs if both <b>cmn:CarrierBusinessPartyInfo</b> and <b>cmn:CarrierBusinessPartyLookupId</b> are empty or null. |
| CarrierBusinessPartyLookupId                                                                                                     | Could not perform Company Master Data lookup to populate transportation carrier business address identifier. None of the permitted regulatory identifier types were configured in your Company Master Data. Please configure a COMPANYID, DUNS, GLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REG, GCP, IN_COMPANY_ID, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <ToBusinessPartyLookupId / type> <ToBusinessPartyLookupId> as appropriate for the requirement of your ship from market, and reprocess the file." | The error occurs if none of the valid regulatory identifier types exist in Master Data.                                     |
| ContractType                                                                                                                     | ContractType for receiving event for delivery <n> contains invalid value. format(receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                 | The error occurs if the source is invalid.                                                                                  |
|                                                                                                                                  | ContractType for receiving event for delivery <n> not found. format (receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if the required source is missing or null.                                                                 |
| CurrencyCode                                                                                                                     | CurrencyCode for receiving event for delivery <n> not found. format (receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if the required source is missing or null.                                                                 |
| deliveryNumber, senderInfo, receiverInfo, shipToCountryCode, ReceiptDistributionType, SenderInfo, ReceiverInfo, TransactionDate, | Required field <x> is null (deliveryNumber, senderInfo, receiverInfo, shipToCountryCode, ReceiptDistributionType, SenderInfo, ReceiverInfo,                                                                                                                                                                                                                                                                                                                                                              | The error occurs if a required field is empty or null.                                                                      |

| Data Element                                                  | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Description                                                                                                  |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| TransactionIdentifier                                         | TransactionDate, TransactionIdentifier)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                              |
| District                                                      | District for receiving event for delivery <n> not found. format (receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if the required source is missing or null.                                                  |
|                                                               | District for receiving event for delivery <n> must contain exactly 3 numeric digits. format(receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                  | The error occurs if source is not a 3-digit numeric code.                                                    |
| FromBusinessPartyInfo                                         | FromBusinessPartyInfo lookup failed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The error occurs if source lookup failed.                                                                    |
| FromBusinessPartyInfo, FromBusinessPartyLookupId              | FromBusinessPartyInfo and FromBusinessPartyLookupId are both empty                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The error occurs if both cmn:FromBusinessPartyInfo and cmn:FromBusinessPartyLookupId empty or null.          |
| FromBusinessPartyLookupId                                     | Could not perform Master Data lookup to populate sender business address identifier. None of the permitted regulatory identifier types were configured in your Company or Partner Company Master Data. Please configure a COMPANYID, DUNS, GLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REG, GCP, IN_COMPANY_ID, IN_LOCATION_ID, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <FromBusinessPartyLookupId / type> <FromBusinessPartyLookupId> as appropriate for the requirement of your ship to market, and reprocess the file. | The error occurs if none of the valid regulatory identifier types exist in Master Data.                      |
| idTyp                                                         | Ship From Location LookupId type is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The error occurs if the source is empty or null.                                                             |
|                                                               | Ship To Location LookupId type is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                              |
|                                                               | From Business Party LookupId type is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                              |
|                                                               | To Business Party LookupId type is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                              |
| idVal                                                         | To Business Party LookupId value is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The error occurs if the source is empty or null.                                                             |
|                                                               | From Business Party LookupId value is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                              |
|                                                               | Ship From Location LookupId value is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                              |
|                                                               | Ship To Location LookupId value is empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                              |
| inFilename, origFilename, origFilename, origFileDate, cntrlID | File <inFilename> is a potential duplicate match with file <origFilename> sent from <origFilename> received on <origFileDate>, based on both files having the same File Control Number <cntrlID>.                                                                                                                                                                                                                                                                                                                    | The error occurs if file is a duplicate.                                                                     |
| InternalMaterialCode or PackagingItemCode                     | Either InternalMaterialCode or PackagingItemCode must be provided.                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The error occurs if both <b>cmn:InternalMaterialCode</b> and <b>cmn:PackagingItemCode</b> are empty or null. |

| Data Element         | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Description                                                                                                                              |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| lookupTyp, lookupVal | Could not perform Master Data lookup to populate sender business address fields. <lookupTyp> <lookupVal> is not configured in your Company or Partner Master Data. Please configure <lookupTyp> <lookupVal> in Company or Partner Master Data, and reprocess the file. (lookupType, lookupVal, lookupType, lookupVal)                                                                                                                                                                                                                                   | The error occurs if the lookupTyp and lookupVal for Company or Partner Master Data has not been configured.                              |
|                      | Could not perform Master Data lookup to populate the sender shipping address identifier. None of the permitted regulatory identifier types were configured in your Company or Partner Location Master Data. Please configure a COMPANYSITEID, DEA, DUNS4, GLN, HIN, SGLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REG, CUIT, HIN, GCP, IN_LOCATION_ID, IN_IEC, IN_PAN, IN_TIN, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <lookupTyp> <lookupVal> as appropriate for the requirement of your ship from market, and reprocess the file. (lookupType, lookupVal)   | The error occurs if no valid lookupTyp and lookupVal were configured to populate the sender shipping address identifier.                 |
|                      | Could not perform Location Master Data lookup to populate the receiving address identifier. None of the permitted regulatory identifier types were configured in your Company nor Partner Location Master Data. Please configure a COMPANYSITEID, DEA, DUNS4, GLN, HIN, SGLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REG, CUIT, HIN, GCP, IN_LOCATION_ID, IN_IEC, IN_PAN, IN_TIN, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <lookupTyp> <lookupVal> as appropriate for the requirement of your ship to market, and reprocess the file. (lookupType, lookupVal) | The error occurs if no valid lookupTyp and lookupVal were configured to populate the receiving address identifier.                       |
|                      | Could not perform Master Data lookup to populate transportation carrier business address identifier. None of the permitted regulatory identifier types were configured in your Company or Partner Company Master Data. Please configure a COMPANYID, CUIT, DUNS, GLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REGGCP, IN_COMPANY_ID, IN_IEC, IN_PAN, IN_TIN, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <lookupTyp> <lookupVal> as appropriate for the requirement of your ship from market, and reprocess the file. (lookupType, lookupVal)                     | The error occurs if no valid lookupTyp and lookupVal were configured to populate the transportation carrier business address identifier. |
|                      | Could not perform Company Master Data lookup to populate receiver business address identifier. None of the permitted regulatory identifier types were configured in your Company Master Data. Please configure a COMPANYID, CUIT, DUNS, GLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REGGCP, IN_COMPANY_ID, IN_IEC, IN_PAN, IN_TIN, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <lookupTyp> <lookupVal> as appropriate for the requirement of your ship to market, and reprocess                                                                                  | The error occurs if no valid lookupTyp and lookupVal were configured to populate the receiver business address identifier.               |

| Data Element  | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Description                                                                                                              |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|               | the file. (lookupType, lookupVal)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          |
|               | Could not perform Master Data lookup to populate sender business address identifier. None of the permitted regulatory identifier types were configured in your Company or Partner Company Master Data. Please configure a COMPANYID, CUIT, DUNS, GLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REG, GCP, IN_COMPANY_ID, IN_IEC, IN_PAN, IN_TIN, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <lookupTyp> <lookupVal> as appropriate for the requirement of your ship to market, and reprocess the file. (lookupType, lookupVal) | The error occurs if no valid lookupTyp and lookupVal were configured to populate the sender business address identifier. |
|               | Could not perform Company Master Data lookup to populate receiver business address fields. <lookupTyp> <lookupVal> is not configured in your Company Master Data. Please configure <lookupTyp> <lookupVal> in Company Master Data, and reprocess the file. (lookupType, lookupVal, lookupType, lookupVal)                                                                                                                                                                                                           | The error occurs if lookupTyp and lookupVal for Company Master Data have not been configured.                            |
|               | Could not perform Master Data lookup to populate sender shipping address fields. <lookupTyp> <lookupVal> is not configured in your Company or Partner Location Master Data. Please configure <lookupTyp> <lookupVal> in Company or Partner Location Master Data, and reprocess the file. (lookupType, lookupVal, lookupType, lookupVal)                                                                                                                                                                             | The error occurs if lookupTyp and lookupVal for Company or Partner Master Data have not been configured.                 |
|               | Could not perform Location Master Data lookup to populate receiver shipping address fields. <lookupTyp> <lookupVal> is not configured in your Company Location Master Data nor in your Partner Location Master Data. Please configure <lookupTyp> <lookupVal> in Company Location Master Data or in Partner Location Master Data (if the ship to location is a partner location) and reprocess the file. (lookupType, lookupVal, lookupType, lookupVal)                                                             | The error occurs if lookupTyp and lookupVal for Company or Partner Location Master Data have not been configured.        |
|               | Could not perform Master Data lookup to populate transportation carrier business address fields. <lookupTyp> <lookupVal> is not configured in your Company or Partner Company Master Data. Please configure <lookupTyp> <lookupVal> in Company or Partner Company Master Data, and reprocess the file. (lookupType, lookupVal, lookupType, lookupVal)                                                                                                                                                               | The error occurs if lookupTyp and lookupVal for Company or Partner Master Data have not been configured.                 |
| message       | message body is null                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The error occurs if the source is empty or null.                                                                         |
| OrderItemList | OrderItemList for receiving event for delivery <n> not found. format (receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                                       | The error occurs if the required source is missing or null.                                                              |



| Data Element             | Error Message                                                                                                                                                                                                                                                                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OrderItems               | OrderItems for receiving event for delivery <n> not found. format (receipt.deliveryNumber)                                                                                                                                                                                                                                        | The error occurs if the required source is missing or null.                                                                                                                                                                                                                                                                                                                                                       |
| Quantity                 | Quantity is required if IsSerialized = false                                                                                                                                                                                                                                                                                      | The error occurs if <b>IsSerialized = false</b> , but source is empty or null.                                                                                                                                                                                                                                                                                                                                    |
| ReceiptDistributionType  | For Receipt <DeliveryNumber>, receipt serials was not found.                                                                                                                                                                                                                                                                      | The error occurs if the source was not previously submitted                                                                                                                                                                                                                                                                                                                                                       |
| ReceiverInfo             | Serialized Operations Manager Receipt inbound processing could not be completed. The ReceiverInfo with either ToBusinessPartyLookupId or ToBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified.                                                 | The error occurs if <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
| ReceiverInfo             | Serialized Operations Manager Receipt inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified.                                                                                                                    | The error occurs if ReceiverInfo and the source are both empty or null, and both the ShipToCountryCode and ShipFromCountryCode are empty or null.                                                                                                                                                                                                                                                                 |
| SenderInfo               |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                   |
| SenderInfo               | Serialized Operations Manager Receipt inbound processing could not be completed. The SenderInfo with either FromBusinessPartyLookupId or FromBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode>.                                                                 | The error occurs if <ul style="list-style-type: none"> <li>Transfer or Sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or Sale Export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
| serialNumber             | Serial Number <n> does not exist. (serial number)                                                                                                                                                                                                                                                                                 | The error occurs if the source provided does not exist.                                                                                                                                                                                                                                                                                                                                                           |
|                          | Cannot perform operation on serial number <n> with item state PendingReceipt. This operation can only be performed when the serial number is Available. (serial number)                                                                                                                                                           | The error occurs if source is still in a pending state.                                                                                                                                                                                                                                                                                                                                                           |
| ShipFromLocationLookupId | Could not perform Master Data lookup to populate the sender shipping address identifier. None of the permitted regulatory identifier types were configured in your Company or Partner Location Master Data. Please configure a COMPANYSITEID, DEA, DUNS4, GLN, HIN, SGLN, BR_CPF, BR_CNES, BR_CNPNJ or BR_PROF_REG, HIN, GCP, IN_ | The error occurs if none of the valid regulatory identifier types exist in Master Data.                                                                                                                                                                                                                                                                                                                           |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Description                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   | LOCATION_ID, KR_BUS_REG_NUMBER, KR_PROVIDER_CODE for <ShipFromLocationLookupId / type> <ShipFromLocationLookupId> as appropriate for the requirement of your ship from market, and reprocess the file.                                                                                                                                                                                                                                                                                                                                 |                                                                                                                   |
| ShipToLocationInfo                                                                                                                                                | ShipToLocationInfo lookup failed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The error occurs if source lookup failed.                                                                         |
| ShipToLocationInfo, ShipToLocationLookupId                                                                                                                        | ShipToLocationInfo and ShipToLocationLookupId are both empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | The error occurs if both cmn:ShipToLocationInfo and cmn:ShipToLocationLookupId are empty or null.                 |
| ShipToLocationLookupId                                                                                                                                            | Could not perform Location Master Data lookup to populate the receiving address identifier. None of the permitted regulatory identifier types were configured in your Company nor Partner Location Master Data. Please configure a COMPANYSITEID, DEA, DUNS4, GLN, HIN , SGLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REG, HIN, GCP, IN_LOCATION_ID, KR_BUS_REG_NUMBER, or KR_PROVIDER_CODE for <ShipToLocationLookupId / type> <ShipToLocationLookupId> as appropriate for the requirement of your ship to market, and reprocess the file. | The error occurs if none of the valid regulatory identifier types exist in Master Data.                           |
| SupplyType                                                                                                                                                        | SupplyType for receiving event for delivery <n> contains invalid value. format(receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                                                 | The error occurs if the source is invalid.                                                                        |
|                                                                                                                                                                   | SupplyType for receiving event for delivery <n> not found. format (receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                                                             | The error occurs if the required source is missing or null.                                                       |
| ToBusinessPartyInfo                                                                                                                                               | ToBusinessPartyInfo lookup failed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The error occurs if source lookup failed.                                                                         |
| ToBusinessPartyInfo, ToBusinessPartyLookupId                                                                                                                      | ToBusinessPartyInfo and ToBusinessPartyLookupId are both empty                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The error occurs if both <b>cmn:ToBusinessPartyInfo</b> and <b>cmn:ToBusinessPartyLookupId</b> are empty or null. |
| ToBusinessPartyLookupId                                                                                                                                           | Could not perform Company Master Data lookup to populate receiver business address identifier. None of the permitted regulatory identifier types were configured in your Company Master Data. Please configure a COMPANYID, DUNS, GLN, BR_CPF, BR_CNES, BR_CNPJ, BR_PROF_REG, GCP, KR_BUS_REG_NUMBER for <ToBusinessPartyLookupId / type> <ToBusinessPartyLookupId> as appropriate for the requirement of your ship to market, and reprocess the file.                                                                                 | The error occurs if none of the valid regulatory identifier types exist in Master Data.                           |
| UnitPrice                                                                                                                                                         | UnitPrice for receiving event for delivery <n> not found. format (receipt.deliveryNumber)                                                                                                                                                                                                                                                                                                                                                                                                                                              | The error occurs if the required source is missing or null.                                                       |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                   |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                   |

# Receipt (EPCIS v1.2)

## Guidelines

To receive both shipment information and serial numbers in this message, all shipment data must originate from the same system. If shipment information and serial numbers must be received separately (e.g. because shipment information is managed in a separate ERP system), use a combination of this message and the Receipt (XML) message (i.e. submit the Receipt (XML) message containing the shipment information and set the DeliveryComplete flag to "false", and then submit the Receipt (EPCIS v1.2) message containing the Delivery Number and list of EPCs.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_RECEIPT

**Info Exchange Display Name:** Shipment Receipt

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

ⓘ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.1000000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type | Description                                  |
|---------------------|---------------|------|----------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -    | <b>Required.</b> EPCIS message root element. |

| Data Element |  |  |                                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|-------------------------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | @schemaVersion                      | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | @creationDate                       | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | EPCISHeader                         | 0...1<br>-    | -        | <b>Required.</b> The XML file control header. Only receiving event is supported: no aggregation.                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | sbdh:StandardBusinessDocumentHeader | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                        |
|              |  |  | sbdh:HeaderVersion                  | 1...1<br>0/*  | String   | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                           |
|              |  |  | sbdh:Sender                         | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                   |
|              |  |  | sbdh:Identifier                     | 1...1<br>1/*  | String   | <b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type. <sup>4</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example: <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sgln:088202.867701.0</code></li> <li>• <code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <div> <i>i</i> GLN will not have a urn/http prefix. </div> |
|              |  |  | @Authority                          | 1...1<br>1/*  | String   | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>5</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                               |
|              |  |  | sbdh:Receiver                       | 1...*<br>-    | -        | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                  |

<sup>1</sup>1.2<sup>2</sup>2016-12-18T22:08:02Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |  |  |                             | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|-----------------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | sbdh:Identifier             | 1...1<br>1/*  | String   | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLN will not have a urn/http prefix.</p> |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String   | <p><b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>2</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                            |
|              |  |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | sbdh:Standard               | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | sbdh:TypeVersion            | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a> . <sup>4</sup>                                                                                                                                                                                                                                                               |
|              |  |  |  | sbdh:InstanceIdentifier     | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>5</sup>                                                                                                                                                                                                                                                                                              |
|              |  |  |  | sbdh:Type                   | 1...1<br>0/*  | String   | <b>Required.</b> This element identifies the document type. The Type value is set to "Events". <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | sbdh:CreationDateAndTime    | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <a href="#">Z</a> . <sup>7</sup>                                                                                                                                                                                                                      |
|              |  |  |  | extension                   | 0...1         | -        | Header extension area with master data attributes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCGlobal<sup>4</sup>1.0<sup>5</sup>201703301745200001<sup>6</sup>Events<sup>7</sup>2017-03-30T22:08:02Z

| Data Element |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|-----------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | EPCISMasterData       | 0...1<br>-    | -      | <p>Master data extension header. May contain business and ship party address information. If there is no partner address data in the header extensions, the identifiers in the Source and Destination lists is used for partner master data lookup by TraceLink.</p> <p><b>i</b> Full GS1 conformance requires that all party master data be stored in the EPCIS header extension EPCISMasterData / VocabularyList / Vocabulary / VocabularyElementList / <b>VocabularyElement</b>. It is strongly urged that all party address info for receiving events be sent in the <b>VocabularyElement</b> within the <b>EPCISMasterData</b> header extension.</p> |
|              |  |  |  |  |  | VocabularyList        | 1...1<br>-    | -      | <b>Required.</b> Vocabulary list group master data elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | Vocabulary            | 0...*<br>-    | -      | Looping vocabulary element with discrete partner master data element groups. Vocabulary occurs once each for sold from, ship from, sold to, ship to parties present. Group is optional. If it does not appear in master data header extension, no error will be thrown.                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | @type                 | 1...1<br>0/*  | String | <p><b>Required.</b> Vocabulary type identifying location master data elements for receiving events. Master data type defined by VocabularyElement   @id. <sup>1</sup></p> <p>Valid value: <code>urn:epcglobal:epcis:vtype:Location</code> = location master data.</p> <p><b>i</b> Track the sold from, ship from, sold to, and ship to for receiving event in header master data. Party data in receiving event is mapped from header master in Vocabulary.</p>                                                                                                                                                                                           |
|              |  |  |  |  |  | VocabularyElementList | 0...1<br>-    | -      | List of vocabulary elements that includes all partner master information. Party identifiers and address info are stored in instances of the looping group <b>VocabularyElement</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  | VocabularyElement     | 1...*<br>-    | -      | <p><b>Required.</b> Looping group header for data elements identifying all business party and location master data, including identifiers, identifier types, and address info. VocabularyElement repeats once for each party type:</p> <ul style="list-style-type: none"> <li>• Sold/Transfer from business party (mandatory).</li> <li>• Ship-from location (optional).</li> <li>• Sold/Transfer to business party (mandatory) .</li> <li>• Ship-to location (optional).</li> <li>• Carrier (Brazil) (optional).</li> </ul>                                                                                                                              |

<sup>1</sup>urn:epcglobal:epcis:vtype:Location

| Data Element |  |  |  |  |  |           |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|--|-----------|--|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |           |  |               |        | <p></p> <ul style="list-style-type: none"> <li>Master data lookup is supported. If partner master data is available in TraceLink, indicate master data lookup by sending partner identifiers in the <b>sourceList</b> and <b>destinationList</b> of the receiving event and do not include any address data in any <b>VocabularyElement</b> group.</li> <li>If master data lookup is not intended, send complete address information for at least the sold-from and sold-to partners in the header master data extension. Ship-from and ship-to addresses can also be included.</li> </ul> |
|              |  |  |  |  |  | @id       |  | 1...1<br>0/*  | String | <p><b>Required.</b> SGLN or other partner identifier and type for party master data in VocabularyElement. Must match sourceList or destinationList owning or location party in receiving event from either:</p> <ul style="list-style-type: none"> <li>ObjectEvent   extension   sourceList   <b>source</b> (transfer from, carrier)</li> <li>ObjectEvent   extension   destinationList   <b>destination</b> (transfer to)</li> </ul> <p>The identifier value is required for regulatory reporting. <sup>1</sup></p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p>                                                                  |
|              |  |  |  |  |  | attribute |  | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if the above Vocabulary   @id attribute is populated. Looping Name/Value pairs identifying partner address master data elements. This is the value element in the Name/Value pair attribute   @id. Stores master data item value defined by @id. <sup>2</sup></p> <p>Partner master data items currently supported for receiving event:</p> <ul style="list-style-type: none"> <li>Business name</li> <li>Additional identifier</li> <li>Additional identifier type</li> <li>Business classification</li> <li>Street address 1 &amp; 2</li> <li>City</li> <li>District</li> <li>Village</li> <li>House Number</li> </ul>                     |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0<sup>2</sup>Kendall Pharma

| Data Element |  |  |  |  |  |  |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|--|-----|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |     |               |        | <ul style="list-style-type: none"> <li>• Township</li> <li>• Corporate Fax</li> <li>• State/Province/Region</li> <li>• Postal code</li> <li>• Country code</li> <li>• Premises code</li> <li>• Tax registration code</li> </ul> <p> Create one instance of the Name/Value pair attribute and @id for each master data element returned.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | @id | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if the above <b>attribute</b> element is populated. Provides the name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using urn or http prefix. <sup>1</sup></p> <p>Valid values:</p> <ul style="list-style-type: none"> <li>• <a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</a></li> <li>• <a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</a></li> <li>• <a href="http://epcis.tracelink.com/mda/AddressObjectGUID">http://epcis.tracelink.com/mda/AddressObjectGUID</a></li> <li>• <a href="http://epcis.tracelink.com/mda/district">http://epcis.tracelink.com/mda/district</a></li> <li>• <a href="http://epcis.tracelink.com/mda/village">http://epcis.tracelink.com/mda/village</a></li> <li>• <a href="http://epcis.tracelink.com/mda/houseNumber">http://epcis.tracelink.com/mda/houseNumber</a></li> <li>• <a href="http://epcis.tracelink.com/mda/township">http://epcis.tracelink.com/mda/township</a></li> <li>• <a href="http://epcis.tracelink.com/mda/corporateFax">http://epcis.tracelink.com/mda/corporateFax</a></li> <li>• <a href="http://epcis.tracelink.com/mda/HouseGUID">http://epcis.tracelink.com/mda/HouseGUID</a></li> <li>• <a href="http://epcis.tracelink.com/mda/partyRoleCode">http://epcis.tracelink.com/mda/partyRoleCode</a></li> <li>• <a href="http://epcis.tracelink.com/mda/premisesCode">http://epcis.tracelink.com/mda/premisesCode</a></li> <li>• <a href="http://epcis.tracelink.com/mda/taxRegistrationCode">http://epcis.tracelink.com/mda/taxRegistrationCode</a></li> <li>• <a href="urn:epcglobal:cbv:mda#name">urn:epcglobal:cbv:mda#name</a></li> <li>• <a href="urn:epcglobal:cbv:mda#streetAddressOne">urn:epcglobal:cbv:mda#streetAddressOne</a></li> </ul> |

<sup>1</sup>urn:epcglobal:cbv:mda#name



| Data Element |           |             |                     |     |  |  |  |  |  | Occurs Length | Type                                                                                                                                                                                                                                                                                              | Description                                                                                                                                                                                                                                                                       |                                                                                             |
|--------------|-----------|-------------|---------------------|-----|--|--|--|--|--|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
|              |           |             |                     |     |  |  |  |  |  |               | <ul style="list-style-type: none"><li>urn:epcglobal:cbv:mda#streetAddressTwo</li><li>urn:epcglobal:cbv:mda#streetAddressThree</li><li>urn:epcglobal:cbv:mda#city</li><li>urn:epcglobal:cbv:mda#state</li><li>urn:epcglobal:cbv:mda#postalCode</li><li>urn:epcglobal:cbv:mda#countryCode</li></ul> |                                                                                                                                                                                                                                                                                   |                                                                                             |
| EPCISBody    |           |             |                     |     |  |  |  |  |  | 1...1<br>-    | -                                                                                                                                                                                                                                                                                                 | Required. Contains all of the EPCIS events for this message.                                                                                                                                                                                                                      |                                                                                             |
|              | EventList |             |                     |     |  |  |  |  |  | 1...1<br>-    | -                                                                                                                                                                                                                                                                                                 | Required. The EventList only contains the ObjectEvent (required).                                                                                                                                                                                                                 |                                                                                             |
|              |           | ObjectEvent |                     |     |  |  |  |  |  | 1...*<br>-    | -                                                                                                                                                                                                                                                                                                 | Required. EventList. Data = "ObjectEvent" for receiving events when all of the following is true: <ul style="list-style-type: none"><li>action = OBSERVE</li><li>bizStep = urn:epcglobal:cbv:bizstep:receiving</li><li>disposition = urn:epcglobal:cbv:disp:in_progress</li></ul> |                                                                                             |
|              |           |             | eventTime           |     |  |  |  |  |  | 1...1<br>1/*  | DateTime                                                                                                                                                                                                                                                                                          | Required. Timestamp of the date/time when the event occurred. Include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>1</sup>                                                                                                                             |                                                                                             |
|              |           |             | eventTimeZoneOffset |     |  |  |  |  |  | 1...1<br>1/*  | String                                                                                                                                                                                                                                                                                            | Required. Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for eventTime. Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                              |                                                                                             |
|              |           |             | epcList             |     |  |  |  |  |  | 1...1<br>-    | -                                                                                                                                                                                                                                                                                                 | Required. List of the EPCs of top most containers (e.g. pallets, cases) in the shipment.                                                                                                                                                                                          |                                                                                             |
|              |           |             |                     | epc |  |  |  |  |  |               | 1...*<br>1/*                                                                                                                                                                                                                                                                                      | String                                                                                                                                                                                                                                                                            | Required. The EPC identifier in <a href="#">EPC Pure Identity URI format</a> . <sup>3</sup> |
|              |           |             | action              |     |  |  |  |  |  | 1...1<br>0/*  | String                                                                                                                                                                                                                                                                                            | Required. This field indicates the action taken in the message. The action value is set to OBSERVE for a receiving event. <sup>4</sup><br>See the <a href="#">ActionType</a> enumeration list for valid values.                                                                   |                                                                                             |

<sup>1</sup>2017-03-29T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:068202.0401034.11220207026272<sup>4</sup>OBSERVE

| Data Element |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|--------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizStep            | 0...1<br>0/*  | AnyURI | <b>Required.</b> This value indicates the business step taken in the event. The <b>bizStep</b> value is set to <a href="#">urn:epcglobal:cbv:bizstep:receiving</a> for a receiving event. <sup>1</sup>                                                                                                                                                  |
|              |  |  |  | disposition        | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> , <b>disposition</b> , and <b>action</b> elements define the message event and are grouped together under the GS1 EPCIS guidelines. The disposition indicates the status of the transaction. The disposition value is set to <a href="#">urn:epcglobal:cbv:disp:in_progress</a> for a receiving event. <sup>2</sup> |
|              |  |  |  | readPoint          | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | id                 | 1...1<br>0/*  | AnyURI | Not used.                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | bizLocation        | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | id                 | 1...1<br>1/*  | AnyURI | Not used.                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | bizTransactionList | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>bizStep</b> = <a href="#">urn:epcglobal:cbv:bizstep:receiving</a> .                                                                                                                                                                                                                                                 |
|              |  |  |  | bizTransaction     | 1...*<br>0/*  | AnyURI | <b>Required.</b> The business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or the Return and/or Purchase Order governing this shipment, subject to Section 8.4.2 of [CBV1.0]. <sup>3</sup><br>Delivery document is mandatory in the receiving transaction. All other document types are optional.                          |
|              |  |  |  | @type              | 1...1<br>1/*  | String | <b>Required.</b> The transaction identifier type (e.g. PO, ASN, RETURN, etc). <sup>4</sup><br>See the <a href="#">TransactionId</a> enumeration list for valid values.                                                                                                                                                                                  |
|              |  |  |  | @date              | 0...1<br>0/*  | Date   | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>RU</b> . The transaction identifier date. <sup>5</sup>                                                                                                                                                                                                                              |
|              |  |  |  | tl:locationId      | 0...1<br>-    | String | Serialized Operations Manager external subscriber location identifier.<br><br> When an external Serialized Operations Manager subscriber submits messages, TraceLink uses the                                                                                      |

<sup>1</sup>urn:epcglobal:cbv:bizstep:receiving<sup>2</sup>urn:epcglobal:cbv:disp:in\_progress<sup>3</sup>urn:epcglobal:cbv:bt:0882028677019:H9022413<sup>4</sup>urn:epcglobal:cbv:btt:desadv<sup>5</sup>2019-03-30

| Data Element |  |  |  |                 |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|-----------------|--|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                 |  |               |        | subscriber company integration user to perform the action and log this message in the audit trail, so that all messages executed by that subscriber are attributed to that company.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | extension       |  | 0...1<br>-    | -      | GS1 ObjectEvent extension.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | sourceList      |  | 0...1<br>-    | -      | <p><b>Conditionally required</b> if partner master data for transfer from party/location is populated in header extension <b>VocabularyElement</b>. Source list identifying sending and carrier parties identified in header extensions level. If Master Data exists in the Tracelink system, then master data lookup is supported. To use master data lookup, do not send any partner address info in the EPCIS header master data extension. Only send the partner identifiers in <b>sourceList</b> and <b>destinationList</b>.</p> <p>TraceLink reads the party identifiers from <b>sourceList</b> and <b>destinationList</b> to run the master data lookup. Do not send partner identifiers and address info in the master data header.</p> <div> <p><b>i</b></p> <ul style="list-style-type: none"> <li>If partner master data is present in the header, the system will map from the header. Partner identifiers must match the partner identifiers in the <b>sourceList</b> and <b>destinationList</b>.</li> <li>If the partner master data header, <b>sourceList</b>, and <b>destinationList</b> are not populated, an error occurs.</li> </ul> </div> |
|              |  |  |  | source          |  | 1...*<br>0/*  | String | <p><b>Required.</b> Source party identifier for sold-from, ship-from, or carrier parties. Must match same partner identifiers in header extension <b>VocabularyElement</b>.<sup>1</sup></p> <p>Used for master data lookup if partner identifier and address info is not present in header master data.</p> <p>If ship-from party is the same as sold-from party, ship-from does not need to be included.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | @type           |  | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies type of source party identifier, ie, owning (sold-from) or location (ship-from) party. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Sold-from party = <code>urn:epcglobal:cbv:sdt:owning_party</code> (mandatory).</li> <li>Ship-from party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | destinationList |  | 0...1<br>-    | -      | <p><b>Conditionally required</b> if partner master data for transfer from party/location is populated in header extension <b>VocabularyElement</b>. Destination list identifying receiving parties identified in header extensions level.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0<sup>2</sup>urn:epcglobal:cbv:sdt:owning\_party

| Data Element |  |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--|-----------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                             |               |        | <p>If Master Data exists in the Tracelink system, master data lookup is supported. To use master data lookup, do not send any partner address info in the EPCIS header master data extension. Only send the partner identifiers in destinationList and sourceList.</p> <p>TraceLink reads the party identifiers from destinationList and sourceList to run master data lookup. Do not send partner identifiers and address info in the master data header.</p> <div>  <ul style="list-style-type: none"> <li>If partner master data is present in the header, the system will map from the header. Partner identifiers must match the partner identifiers in the <b>sourceList</b> and <b>destinationList</b>.</li> <li>If the partner master data header, <b>sourceList</b>, and <b>destinationList</b> are not populated, an error occurs.</li> </ul> </div> |
|              |  |  |  |  | destination                 | 1...*<br>0/*  | String | <p><b>Required.</b> Destination party identifier for sold-to and ship-to parties. Must match same partner identifiers in header extension <b>VocabularyElement</b>.<sup>1</sup></p> <p>Used for master data lookup if partner identifier and address info is not present in header master data.</p> <p>If ship-to party the same as sold-to party, ship-from does not need to be included.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | @type                       | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies type of destination party identifier, i.e. owning (sold-to) or location (ship-to) party. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Sold-to party = <code>urn:epcglobal:cbv:sdt:owning_party</code> (mandatory).</li> <li>Ship-to party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | tl:receivingEventExtensions | 0...1<br>-    | -      | Receiving event with the list of serial numbers being received from supplier's shipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | tl:transactionDate          | 1...1<br>-    | Date   | <p><b>Required.</b> Date associated with the business transaction document in bizTransactionList in YYYY-MM-DD format. This date may or may not be the same as the eventTime.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | tl:shipToCountryCode        | 1...1<br>2/2  | String | <p><b>Required.</b> 2-letter ISO country code for ship-to country. This value is referenced to advise regulatory reporting if it is required for the specified country market.<sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>urn:epc:id:sgln:033333.101365.0<sup>2</sup>urn:epcglobal:cbv:sdt:owning\_party<sup>3</sup>2017-03-29<sup>4</sup>US

| Data Element |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                            |               |        | <p>ⓘ Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.</p> <p>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.</p>                                                                                                                                                                                  |
|              |  |  |  | tl:shipFromCountryCode     | 0...1<br>2/2  | String | <p>2-letter ISO country code for ship-from country. This value is referenced to advise regulatory reporting if it is required for the specified country market. <sup>1</sup></p> <p>ⓘ Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink application.</p> <p>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.</p> |
|              |  |  |  | tl:receiptDistributionType | 1...1<br>1/*  | String | <p><b>Required.</b> Informs what types of regulatory reporting may be triggered based on the nature of the transaction: <sup>2</sup></p> <ul style="list-style-type: none"> <li>• Purchase, transfer, or return within the same country.</li> <li>• Purchase, transfer, or return from another country.</li> </ul> <p>See the <a href="#">ReceiptDistributionType</a> enumeration list for valid values.</p>                                                            |
|              |  |  |  | tl:supplyType              | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>ShipToCountryCode</b> = <b>KR</b> and <b>SalesDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b>; all values except for Collection apply. Identifies the type of supply that is being performed. <sup>3</sup></p> <p>See the <a href="#">SupplyType</a> enumeration list for valid values.</p>                                                                                                                      |
|              |  |  |  | tl:contractType            | 0...1<br>0/*  | String | <p>Identifies if a private or competitive bid contract is used for the sale of goods.</p> <p>See the <a href="#">ContractType</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:comments                | 0...1<br>0/*  | String | Optional remarks or comments associated with the delivery.                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | tl:contractNumber          | 0...1<br>0/*  | String | Identification number of the contract. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>US<sup>2</sup>INCOUNTRYSALE<sup>3</sup>PatientDistribution<sup>4</sup>1234567

| Data Element |  |  |  |                            | Occurs Length  | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|----------------------------|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:fundingSource           | 0...1<br>0/*   | String  | <b>Required.</b> Source of the funding. <sup>1</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | tl:registerUnknownSNs      | 0...1<br>0/*   | Boolean | Determines whether the serial numbers that are unknown to SOM (in <b>tl:epcOrderItemList</b> ) should be registered.<br>Valid values: <sup>2</sup> <ul style="list-style-type: none"> <li><b>true</b> – register all serial numbers that do not currently exist in Serialized Operations Manager in an available state.</li> <li><b>false</b> – (default) all serial numbers that do not currently exist in Serialized Operations Manager are rejected.</li> </ul> |
|              |  |  |  | tl:transferWithoutShipment | 0...1<br>0/*   | Boolean | Indicates that the serial numbers are already in an <b>Available</b> state because there is no associated shipment event. Valid values: <ul style="list-style-type: none"> <li><b>true</b> – Serial numbers are in the <b>Available</b> state.</li> <li><b>false</b> (default) – Serial numbers are in the <b>Pending Receipt</b> state.</li> </ul> Only use when <b>tl:receiptDistributionType</b> = <b>INCOUNTRYTRANSFER</b> or <b>IMPORTTRANSFER</b> .          |
|              |  |  |  | tl:entryPort               | 0...1<br>0/*   | String  | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:exitPort                | 0...1<br>0/*   | String  | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:deliveryInspection      | 0...1<br>0/*   | String  | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:deliveryInspectionDate  | 0...1<br>10/10 | Date    | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:deliveryInspectionNote  | 0...1<br>0/*   | String  | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:removalFromCirculation  | 0...1<br>0/*   | String  | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | tl:aggregationInspection   | 0...1          | String  | The inspection status of the aggregation hierarchy of the container.                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>FederalBudgetFunds<sup>2</sup>false<sup>3</sup>2021-12-21

| Data Element |  |  |  |  |                                | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--------------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                                |               |         | See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | tl:epcOrderItemDetails         | 0...1<br>-    | -       | Group header with specific link between <b>tl:orderItemNumber</b> in the ObjectEvent for Shipping Events and the epc serial number.                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | tl:epcOrderItemList            | 1...*<br>-    | -       | Group header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | @orderItemNumber               | 0...1<br>0/*  | String  | List of serial numbers associated with the pricing and tax information in the current instance of the <b>orderItem</b> .                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:epcOrderItem                | 1...*<br>0/*  | String  | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>OrderItem</b> , in EPC Pure Identity URI format.                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:orderItemList               | 0...1<br>-    | -       | Populate the order item list group to communicate the return quantities for each item code at the EACH (unit) level.                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:allowShortVerificationCount | 0...1<br>0/*  | Boolean | Instructs TraceLink whether or not to generate an error if the picked or received counts are less than expected when comparing picked or received serial number counts in <b>tl:epcOrderItemList</b> . Valid values: <sup>1</sup> <ul style="list-style-type: none"> <li><b>true</b> – instructs TraceLink to generate an error if the picked or received counts are less than expected.</li> <li><b>false</b> – (default) TraceLink does not generate an error if the picked or received counts are less than expected.</li> </ul> |
|              |  |  |  |  | tl:orderItem                   | 1...*<br>-    | -       | <b>Required.</b> Order item group is a repeating element that captures the item code, lot number, and quantity for each item in the order. Communicate each unique item code and lot number in a separate order item group.                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:orderItemNumber             | 0...1<br>0/*  | String  | Order item number attribute associating specific serial numbers to the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | choice%1                       | 1...1<br>-    | Choice  | <b>Required.</b> Populate only one of <b>tl:InternalMaterialCode</b> , <b>tl:PackagingItemCode</b> , or <b>tl:countryDrugCode</b> . One of the three options must be present.                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | tl:internalMaterialCode        | 0...1<br>1/*  | String  | <b>Conditionally required</b> if neither <b>tl:packagingItemCode</b> nor <b>tl:countryDrugCode</b> is present. Option 1 for choice%1 in <b>tl:orderItem</b> . Use to identify the product using the internal material number configured in Product Master Data. <sup>2</sup>                                                                                                                                                                                                                                                        |

<sup>1</sup>false<sup>2</sup>100234

| Data Element |  |  |  |  |  |  |                             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|--|--|-----------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:packagingItemCode        | 0...1<br>0/*  | String  | <b>Conditionally required</b> if neither <b>tl:internalMaterialCode</b> nor <b>tl:countryDrugCode</b> is present. Option 2 for choice%1 in <b>tl:orderItem</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>1</sup> |
|              |  |  |  |  |  |  | @type                       | 0...1<br>0/*  | String  | <b>Required.</b> The product code type for the packaging item code. See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                         |
|              |  |  |  |  |  |  | tl:countryDrugCode          | 0...1<br>0/*  | String  | <b>Conditionally required</b> if neither <b>tl:internalMaterialCode</b> nor <b>tl:packagingItemCode</b> is present. Option 3 for choice%1 in OrderItem. Use to identify the product using the country drug code configured in Product Master Data. <sup>2</sup>                                 |
|              |  |  |  |  |  |  | @type                       | 0...1<br>0/*  | String  | <b>Required.</b> The national drug code type using the supported enumeration values. <sup>3</sup>                                                                                                                                                                                               |
|              |  |  |  |  |  |  | cbvmdata:lotNumber          | 0...1<br>0/*  | String  | The lot or batch code for the picked items (if available) in an alphanumeric string. <sup>4</sup>                                                                                                                                                                                               |
|              |  |  |  |  |  |  | cbvmdata:itemExpirationDate | 0...1<br>1/*  | Date    | The expiration date for the serialized item, formatted in YYYY-MM-DD format. <sup>5</sup>                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | tl:quantity                 | 1...1<br>0/*  | String  | <b>Required.</b> The quantity of items at the EACH (unit) level of the item code and lot if specified to be picked. <sup>6</sup>                                                                                                                                                                |
|              |  |  |  |  |  |  | tl:unitPrice                | 0...1<br>0/*  | Decimal | <b>Required.</b> <b>Conditionally required</b> if: Unit price of item. <sup>7</sup>                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | @currencyCode               | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>8</sup> See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                                              |
|              |  |  |  |  |  |  | tl:vat                      | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>9</sup>                                                                                                                                                                                                                                                          |

<sup>1</sup>00882025030223<sup>2</sup>0069-4220-66<sup>3</sup>US\_NDC442<sup>4</sup>A12345<sup>5</sup>2019-12-31<sup>6</sup>50<sup>7</sup>35.67<sup>8</sup>USD<sup>9</sup>152.22



| Data Element |  |  |  |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--|--|--|--------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>1</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                                                                                  |
|              |  |  |  |  |  |  | tl:grossPrice            | 0...1<br>0/*  | Decimal | Price including unit price and all taxes and fees. <sup>2</sup>                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  |  | @currencyCode            | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>3</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                                                                                  |
|              |  |  |  |  |  |  | tl:isSerialized          | 0...1<br>0/*  | Boolean | Indicates if item is not serialized. <sup>4</sup><br><div> If omitted, defaults value to "true".</div>                                                                                                                                              |
|              |  |  |  |  |  |  | tl:transactionIdentifier | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present.                                                                                                                                                                                                                        |
|              |  |  |  |  |  |  | @type                    | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. Valid values:<br><ul style="list-style-type: none"> <li>• <a href="#">DESTRUCTION</a></li> <li>• <a href="#">INVOICE</a></li> <li>• <a href="#">NOTAFISCALELETRONICA</a></li> <li>• <a href="#">OTHER</a></li> <li>• <a href="#">PO</a></li> <li>• <a href="#">RETURN</a></li> </ul> |
|              |  |  |  |  |  |  | @date                    | 0...1<br>0/*  | Date    | <b>Conditionally required</b> if <b>tl:shipToCountryCode</b> = <a href="#">RU</a> . The transaction identifier date.                                                                                                                                                                                                                   |
|              |  |  |  |  |  |  | tl:warehouseOperatorName | 0...1<br>0/*  | String  | Name of the person responsible for warehouse operations. <sup>5</sup>                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  |  | tl:correctiveReceipt     | 0...1<br>0/*  | Boolean | Indicates that a new Serialized Operations Manager receipt is correcting a previously voided Serialized Operations Manager receipt. Valid values:                                                                                                                                                                                      |

<sup>1</sup>USD<sup>2</sup>45.67<sup>3</sup>USD<sup>4</sup>true<sup>5</sup>John Smith

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                     |
|--------------|--|--|--|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                           |               |        | <ul style="list-style-type: none"> <li><b>true</b> – The receipt is a corrective receipt.</li> <li><b>false</b> – (default) The receipt is not a corrective receipt.</li> </ul> |
|              |  |  |  |  | tl:originalDeliveryNumber | 0...1<br>0/*  | String | Original delivery number. Records the original delivery number that is replaced when a receipt is voided and corrections are made to that receipt.                              |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:gslushc="http://epcis.gslus.org/hc/ns" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2018-06-12T06:31:32Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8811891013778</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>201806121745200001</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2018-06-12T06:31:32Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  <extension>
    <EPCISMasterData>
      <VocabularyList>
        <Vocabulary type="urn:epcglobal:epcis:vtype:Location">
          <VocabularyElementList>
```

```

    <!-- SourceList owning_party (sold from business party) -->
    <VocabularyElement id="urn:epc:id:sgln:9997777.01994.0">
      <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>
      <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">712333444</attribute>
      <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">DEA</attribute>
      <attribute id="http://epcis.tracelink.com/mda/partyRoleCode">MANUFACTURER</attribute>
      <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
      <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
      <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
      <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
      <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
      <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
      <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <!-- DestinationList owning_party (sold to business party) -->
    <VocabularyElement id="urn:epc:id:gln:8811891013778">
      <attribute id="urn:epcglobal:cbv:mda#name">Wilbur Pharmaceutical</attribute>
      <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">412333444</attribute>
      <attribute
id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">DEA</attribute>
      <attribute id="http://epcis.tracelink.com/mda/partyRoleCode">DISTRIBUTOR</attribute>
      <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">154 Broadway</attribute>
      <attribute id="urn:epcglobal:cbv:mda#city">Somerville</attribute>
      <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
      <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
      <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
      <attribute id="urn:epcglobal:cbv:mda#postalCode">02145</attribute>
      <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>

```

```

        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
</VocabularyElementList>
</Vocabulary>
</VocabularyList>
</EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <ObjectEvent>
            <eventTime>2018-06-12T06:31:32Z</eventTime>
            <eventTimeZoneOffset/>
            <epcList>
                <epc>urn:epc:id:sscc:425093.05100564312</epc>
                <epc>urn:epc:id:sscc:425093.05100564329</epc>
                <epc>urn:epc:id:sscc:425093.05100564336</epc>
                <epc>urn:epc:id:sscc:425093.05100564343</epc>
                <epc>urn:epc:id:sscc:425093.05100564350</epc>
                <epc>urn:epc:id:sscc:425093.05100564367</epc>
                <epc>urn:epc:id:sscc:425093.05100564374</epc>
                <epc>urn:epc:id:sscc:425093.05100564381</epc>
                <epc>urn:epc:id:sscc:425093.05100564398</epc>
            </epcList>
            <action>OBSERVE</action>
            <bizStep>urn:epcglobal:cbv:bizstep:receiving</bizStep>
            <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
            <bizTransactionList>
                <bizTransaction type="http://epcis.tracelink.com/hc/btt/transfer" date="2018-06-12">urn:epcglobal:cbv:bt:8779891013658:987654321</bizTransaction>
                <bizTransaction type="urn:epcglobal:cbv:btt:desadv" date="2018-06-12">urn:epcglobal:cbv:bt:8811891013778:ASN654321</bizTransaction>
            </bizTransactionList>
            <tl:locationId>urn:epc:id:sgln:9997777.01994.0</tl:locationId>
            <extension>
                <sourceList>
                    <!-- owning_party = from business party -->
                    <source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:9997777.01994.0</source>
                </sourceList>
            </extension>
        </ObjectEvent>
    </EventList>
</EPCISBody>
</EPCIS>

```

```

    </sourceList>
    <destinationList>
      <!-- owning_paty = to business party -->
      <destination type="urn:epcglobal:cbv:sdt:owning_
party">urn:epc:id:sgln:881189.101377.8</destination>
    </destinationList>
  </extension>
  <tl:receivingEventExtensions>
    <tl:transactionDate>2018-06-12</tl:transactionDate>
    <tl:shipToCountryCode>US</tl:shipToCountryCode>
    <tl:receiptDistributionType>INCOUNTRYPURCHASE</tl:receiptDistributionType>
    <tl:supplyType>PatientDistribution</tl:supplyType>
    <tl:contractType>PrivateContract</tl:contractType>
    <tl:comments>Wilbur Processing</tl:comments>
    <tl:contractNumber>C102</tl:contractNumber>
    <tl:fundingSource>OwnFunds</tl:fundingSource>
    <tl:transferWithoutShipment>false</tl:transferWithoutShipment>
    <tl:entryPort></tl:entryPort>
    <tl:exitPort></tl:exitPort>
    <tl:epcOrderItemDetails>
      <tl:epcOrderItemList orderItemNumber="205">
        <tl:epcOrderItem>urn:epc:id:sscc:425093.05100564312</tl:epcOrderItem>
        <tl:epcOrderItem>urn:epc:id:sscc:425093.05100564329</tl:epcOrderItem>
      </tl:epcOrderItemList>
    </tl:epcOrderItemDetails>
    <tl:orderItemList>
      <tl:orderItem>
        <tl:orderItemNumber>205</tl:orderItemNumber>
        <tl:packagingItemCode type="GTIN-14">00992326050107</tl:packagingItemCode>
        <cbvmdata:lotNumber>PPP555</cbvmdata:lotNumber>
        <cbvmdata:itemExpirationDate>2020-06-12</cbvmdata:itemExpirationDate>
        <tl:quantity>500</tl:quantity>
        <tl:unitPrice currencyCode="USD">50.43</tl:unitPrice>
        <tl:vat currencyCode="USD">10.45</tl:vat>
        <tl:grossPrice currencyCode="USD">100.00</tl:grossPrice>
        <tl:isSerialized>true</tl:isSerialized>
        <tl:transactionIdentifier type="PO" date="2018-06-12">TI008</tl:transactionIdentifier>
      </tl:orderItem>
    </tl:orderItemList>

```

```

    <tl:warehouseOperatorName>Patrick Murphy</tl:warehouseOperatorName>
    <tl:correctiveReceipt>true</tl:correctiveReceipt>
    <tl:originalDeliveryNumber>6</tl:originalDeliveryNumber>
    </tl:receivingEventExtensions>
  </ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

Errors

| Data Element | Error Message                                          | Description                                      |
|--------------|--------------------------------------------------------|--------------------------------------------------|
| Class 1      |                                                        |                                                  |
| attribute    | Carrier business party city is required !!!            | The error occurs if the source is empty or null. |
| attribute    | Carrier business party state or region is required !!! |                                                  |
| attribute    | Carrier business party country is required !!!         |                                                  |
| attribute    | Carrier business party street address is required !!!  |                                                  |
| attribute    | Ship from location state or region is required !!!     |                                                  |
| attribute    | Ship from location street address is required !!!      |                                                  |

| Data Element | Error Message                                                | Description                                                                                   |
|--------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| attribute    | Ship from location city is required !!!                      | The error occurs if the source is empty or null.                                              |
| attribute    | Ship from location country is required !!!                   |                                                                                               |
| attribute    | Ship to location country is required !!!                     |                                                                                               |
| attribute    | Ship to location city is required !!!                        |                                                                                               |
| attribute    | Ship to location street address is required !!!              |                                                                                               |
| attribute    | Ship to location state or region is required !!!             |                                                                                               |
| attribute    | Sold from business party state or region is required !!!     |                                                                                               |
| attribute    | Sold from business party street address is required !!!      |                                                                                               |
| attribute    | Sold from business party city is required !!!                |                                                                                               |
| attribute    | Sold from business party country is required !!!             |                                                                                               |
| attribute    | Sold from business party name is required !!!                |                                                                                               |
| attribute    | Sold to business party city is required !!!                  |                                                                                               |
| attribute    | Sold to business party country is required !!!               |                                                                                               |
| attribute    | Sold to business party state or region is required !!!       |                                                                                               |
| attribute    | Sold to business party street address is required !!!        |                                                                                               |
| attribute    | Valid business classification code is required !!!           | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| attribute    | Valid business classification code is required !!!           |                                                                                               |
| attribute    | Valid Carrier business party country is required !!!         |                                                                                               |
| attribute    | Valid carrier business party identifier type is required !!! |                                                                                               |
| attribute    | Valid Ship to location country is required !!!               |                                                                                               |
| attribute    | Valid ship to location identifier type is required !!!       |                                                                                               |
| attribute    | Valid ship from location identifier type is required !!!     |                                                                                               |
| attribute    | Valid Ship from location country is required !!!             |                                                                                               |

| Data Element           | Error Message                                                                                   | Description                                                                                                                   |
|------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| attribute              | Valid sold from business party identifier type is required !!!                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| attribute              | Valid Sold to business party country is required !!!                                            |                                                                                                                               |
| attribute              | Valid sold to business party identifier type is required !!!                                    |                                                                                                                               |
| attribute              | Valid Sold from business party country is required !!!                                          |                                                                                                                               |
| attribute              | Carrier business party name is required !!!                                                     | The error occurs if VocabularyElement/attribute fields are populated, but the source is empty or null.                        |
| attribute              | Ship to business party name is required !!!                                                     |                                                                                                                               |
| attribute              | Ship from business party name is required !!!                                                   |                                                                                                                               |
| attribute              | Sold to business party name is required !!!                                                     |                                                                                                                               |
| attribute              | Party type is required if additional business party identifier is populated !!!                 | The error occurs if @id (attribute) = "http://epcis.tracelink.com/mda/additionalIdentifier", but the source is empty or null. |
| attribute              | Party type is required if additional facility identifier is populated !!!                       |                                                                                                                               |
| @currencyCode          | Valid ISO currency code is required !!!                                                         | The error occurs if tl:unitPrice is populated, but the source is not a valid value from the enumeration list.                 |
| bizStep                | bizStep urn:epcglobal:cbv:bizstep:receiving is required for ObjectEvent receiving !!!           | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:receiving".                                          |
| bizTransaction   @type | Valid bizTransaction type is required if bizTransaction is populated !!!                        | The error occurs if bizTransaction is populated, but the source is empty or null.                                             |
| bizTransactionList     | Biz transaction list is required in receiving event !!!                                         | The error occurs if the source is empty or null.                                                                              |
| choice1                | Only one of either InternalMaterialCode or PackagingItemCode or CountryDrugCode is required !!! | The error occurs if tl:internalMaterialCode, tl:packagingItemCode, and tl:countryDrugCode are empty or null.                  |
| destination            | Valid sold-to business lookup identifier type is required !!!                                   | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
|                        | Valid ship-to business lookup identifier type is required !!!                                   |                                                                                                                               |
| disposition            | Disposition urn:epcglobal:cbv:disp:in_progress is required for ObjectEvent receiving !!!        | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".                                           |
| epc                    | Invalid EPC format !!!                                                                          | The error occurs if the source is invalid.                                                                                    |
| ObjectEvent            | Receiving event is required !!!                                                                 | The error occurs if the source is empty or null.                                                                              |



| Data Element                 | Error Message                                                                      | Description                                                                                                                                     |
|------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| source                       | Valid carrier business lookup identifier type is required !!!                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                   |
|                              | Valid sold-from business lookup identifier type is required !!!                    |                                                                                                                                                 |
|                              | Valid ship-from business lookup identifier type is required !!!                    |                                                                                                                                                 |
| tl:packagingItemCode   @type | Packaging item code type is required !!!                                           | The error occurs if tl:packagingItemCode is populated, but the source is empty or null or there is not a valid value from the enumeration list. |
| tl:quantity                  | Quantity is required !!!                                                           | The error occurs if the source is empty or null or is equal to "0".                                                                             |
| tl:receiptDistributionType   | Valid receipt distributionType is required !!!                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                             |
| tl:receivingEventExtensions  | receivingEventExtensions required if receiving event populated !!!                 | The error occurs if ObjectEvent is populated, but the source is empty or null.                                                                  |
| tl:shipFromCountryCode       | Valid ISO country code is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                   |
|                              | Ship from country for import products is required !!!                              | The error occurs if ReceiptDistributionType equals "IMPORTSALE", "IMPORTTRANSFER", or "IMPORTRETURN" but the source is empty or null.           |
| tl:shipToCountryCode         | Valid ISO country code for ship-to country is required !!!                         | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                             |
| tl:supplyType                | Valid supply type code is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                   |
| tl:transactionDate           | Transaction date is required !!!                                                   | The error occurs if the source is empty or null.                                                                                                |
| VocabularyElement            | Ship to party info required in VocabularyElement if present in destinationList !!! | The error occurs if ship-to is present in destinationList but not in the source.                                                                |
|                              | Sold to party identifier is required !!!                                           | The error occurs if sold-to party does not exist as an @id (VocabularyElement).                                                                 |
|                              | Ship from party info required in VocabularyElement if present in sourceList !!!    | The error occurs if ship-from is present in sourceList but not in the source.                                                                   |
|                              | Carrier party info required in VocabularyElement if present in sourceList !!!      | The error occurs if carrier party is present in sourceList but not in the source.                                                               |
|                              | Sold from party identifier is required !!!                                         | The error occurs if Vocabulary   @type =                                                                                                        |

| Data Element                                                                                                                                                      | Error Message                                                             | Description                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   |                                                                           | "urn:epcglobal:epcis:vtype:location", but there is no sold-from party in the source.                                          |
| VocabularyElement   @id                                                                                                                                           | Valid carrier business party identifier type is required !!!              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| VocabularyElement   @id                                                                                                                                           | Valid ship from business party identifier type is required !!!            | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| VocabularyElement   @id                                                                                                                                           | Valid ship to business party identifier type is required !!!              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| VocabularyElement   @id                                                                                                                                           | Valid ship to location identifier type is required !!!                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| VocabularyElement   @id                                                                                                                                           | Valid sold from business party identifier type is required !!!            | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| VocabularyElement   @id                                                                                                                                           | Valid sold to business party identifier type is required !!!              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| VocabularyElement   @id                                                                                                                                           | Party type is required if additional facility identifier is populated !!! | The error occurs if @id (attribute) = "http://epcis.tracelink.com/mda/additionalIdentifier", but the source is empty or null. |
| Class 2                                                                                                                                                           |                                                                           |                                                                                                                               |
| Class 3                                                                                                                                                           |                                                                           |                                                                                                                               |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                           |                                                                                                                               |

## Receipt Event (EPCIS v1.2)

### Guidelines

Serialized Operations Manager Owners and Partners use this message to create receipts for deliveries sent from trade partners. This message supports the required Object Event Receiving event and the optional Aggregation Event.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

#### Message Types:

- SOM\_RECEIPT\_EVENT
- SOM\_RECEIPT\_EVENT\_IB

#### Info Exchange Display Name: Receipt Event

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                     |
|---------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                                                                                                                                                                                    |
| @schemaVersion      | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup>                                                                                                                                                                    |
| @creationDate       | 1...1<br>1/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <a href="#">Z</a> . <sup>2</sup> |

<sup>1</sup>1.2

<sup>2</sup>2016-12-18T22:08:02Z

| Data Element                        |  |  |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------|--|--|--|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPCISHeader                         |  |  |  | 0...1<br>-    | -      | <p><b>Required.</b> XML file control header record. The following use cases are supported in this message:</p> <ul style="list-style-type: none"> <li>Aggregation + Receiving events</li> <li>Receiving event only: no aggregation</li> </ul> <p> Receiving event is mandatory, all other events are optional.</p>                                                                                                                                                                                                                        |
| sbdh:StandardBusinessDocumentHeader |  |  |  | 1...1<br>-    | -      | <p><b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| sbdh:HeaderVersion                  |  |  |  | 1...0/*       | String | <p><b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <b>1.0</b>.<sup>1</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| sbdh:Sender                         |  |  |  | 1...*-        | -      | <p><b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.</p>                                                                                                                                                                                                                                                                                                                                                                         |
| sbdh:Identifier                     |  |  |  | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>2</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li><code>urn:epc:id:sgln:088202.867701.0</code></li> <li><code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLN will not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
| @Authority                          |  |  |  | 1...1<br>1/*  | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>3</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                      |
| sbdh:Receiver                       |  |  |  | 1...*-        | -      | <p><b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.</p>                                                                                                                                                                                                                                                                                                                                                        |
| sbdh:Identifier                     |  |  |  | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup> SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p>                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>1.0<sup>2</sup>1100001014507<sup>3</sup>SGLN<sup>4</sup>1100001014507

| Data Element |  |  |  |                             | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|-----------------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                             |               |          | <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p>❗ GLN will not have a urn/http prefix.</p>                                                                                                                             |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String   | <b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. An update made in December 2016 changed this to accept additional values. <sup>1</sup> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |
|              |  |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -        | <b>Required.</b><br><br>Contains the identification group for the message.                                                                                                                                                                                                                                      |
|              |  |  |  | sbdh:Standard               | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <b>EPCglobal</b> . <sup>2</sup>                                                                                                                                                           |
|              |  |  |  | sbdh:TypeVersion            | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <b>1.0</b> . <sup>3</sup>                                                   |
|              |  |  |  | sbdh:InstanceIdentifier     | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>4</sup>                                                                         |
|              |  |  |  | sbdh:Type                   | 1...1<br>0/*  | String   | <b>Required.</b> Identifies the document type. The <b>sbdh:Type</b> value is set to <b>Events</b> for a shipment event. <sup>5</sup>                                                                                                                                                                            |
|              |  |  |  | sbdh:CreationDateAndTime    | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>6</sup>                   |
|              |  |  |  | extension                   | 0...1<br>-    | -        | Header extension area with master data attributes.                                                                                                                                                                                                                                                              |
|              |  |  |  | EPCISMasterData             | 0...1         | -        | Master data extension header. Will contain business and ship party address information.                                                                                                                                                                                                                         |

<sup>1</sup>SGLN<sup>2</sup>EPCglobal<sup>3</sup>1.0<sup>4</sup>201609201745200001<sup>5</sup>Events<sup>6</sup>2016-12-18T22:08:02Z

| Data Element |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--|-----------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | VocabularyList        | 1...1<br>-    | -      | <b>Required.</b> Vocabulary list group master data elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | Vocabulary            | 0...*<br>-    |        | Looping vocabulary with discrete master data element groups. <b>Vocabulary</b> will occur once each for sold from, ship from, sold to, and ship to parties.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  | @type                 | 1...1<br>0/*  | String | <b>Required.</b> Vocabulary type identifying location master data elements. Master data type defined by VocabularyElement   @id. Valid value: <a href="#">urn:epcglobal:epcis:vtype:Location</a> = party master data. <sup>1</sup><br><br>Sold from, ship from, sold to, and ship to for shipping event are all tracked in header master data. Party data in shipping event is mapped from header master in <b>Vocabulary</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | VocabularyElementList | 0...1<br>-    | -      | List of vocabulary elements that includes all partner master information. Party identifiers and address info are stored in instances of the looping group <b>VocabularyElement</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  | VocabularyElement     | 1...*<br>-    | -      | <b>Required.</b> Looping group header for data elements that identify all business party and location master data, including identifiers, identifier types, and address info.<br><b>VocabularyElement</b> repeats once for each party type: <ul style="list-style-type: none"> <li>Sold/Transfer from business party (Mandatory)</li> <li>Ship from location (Optional)</li> <li>Sold/Transfer to business party (Mandatory)</li> <li>Ship to location (Optional)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | @id                   | 1...1<br>0/*  | String | <b>Required.</b> SGLN or other partner identifier and type for party master data in <b>VocabularyElement</b> . Must match <b>sourceList</b> or <b>destinationList</b> owning or location party in shipping event from: <sup>2</sup> <ul style="list-style-type: none"> <li>ObjectEvent   extension   sourceList   <b>source</b> (transfer from, carrier) OR</li> <li>ObjectEvent   extension   destinationList   <b>destination</b> (transfer to)</li> </ul> The identifier value is mandatory for regulatory reporting. The identifier type must include a valid urn or http string prefix. Valid prefix formats include by namespace: <ul style="list-style-type: none"> <li>GS1: <a href="#">urn:epc:id:sgln:[CompanyPrefix].[LocationReference].[Extension]</a></li> <li>GS1 USHC: <a href="#">http://epcis.gs1us.org/hc/[identifierType]/loc/[identificationValue]</a></li> <li>TraceLink: <a href="#">http://epcis.tracelink.com/hc/[identifierType]/loc/[identificationValue]</a></li> </ul> |

<sup>1</sup>urn:epcglobal:epcis:vtype:Location<sup>2</sup>urn:epc:id:sgln:088202.867701.0

| Data Element |  |  |  |  |  |  |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|--|--|--|--|--|--------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  | attribute(1) | 0...*<br>0/*  | String | <p><b>Required.</b> Looping Name/Value pairs identifying partner address master data elements. This is the value element in the Name/Value pair attribute   @id. Stores master data item value defined by @id.<sup>1</sup></p> <p>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>• Business name – Mandatory if address populated in <b>VocabularyElement</b>.</li> <li>• Business classification – Optional.</li> <li>• Street address 1 – Mandatory if address populated.</li> <li>• Street address 2 – Optional.</li> <li>• City – Mandatory if address populated.</li> <li>• District – Optional</li> <li>• Village – Optional.</li> <li>• House number – Optional.</li> <li>• Township – Optional.</li> <li>• Corporate fax – Optional.</li> <li>• State/Province/Region – Mandatory if address populated.</li> <li>• Postal code – Optional.</li> <li>• Country code – Mandatory if address populated.</li> <li>• Premises code – Optional.</li> <li>• Tax registration code – Optional.</li> </ul> <p>Create one instance of the Name/Value pair <b>attribute</b> and attribute   @id for each master data element returned.</p> |
|              |  |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute</b> is present. Provides the name in the Name/Value pair attribute   @id. Identifies the master data value stored in the attribute value element, using urn or http prefix. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>• urn:epcglobal:cbv:mda#name</li> <li>• urn:epcglobal:cbv:mda#streetAddressOne</li> <li>• urn:epcglobal:cbv:mda#streetAddressTwo</li> <li>• urn:epcglobal:cbv:mda#streetAddressThree</li> <li>• urn:epcglobal:cbv:mda#city</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>Kendall Pharma<sup>2</sup>urn:epcglobal:cbv:mda#name

| Data Element |  |  |  |  |  |  |              |       |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|--|--------------|-------|-----|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |              |       |     |               |        | <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/mda/district">http://epcis.tracelink.com/mda/district</a></li> <li><a href="http://epcis.tracelink.com/mda/village">http://epcis.tracelink.com/mda/village</a></li> <li><a href="http://epcis.tracelink.com/mda/houseNumber">http://epcis.tracelink.com/mda/houseNumber</a></li> <li><a href="http://epcis.tracelink.com/mda/township">http://epcis.tracelink.com/mda/township</a></li> <li><a href="http://epcis.tracelink.com/mda/corporateFax">http://epcis.tracelink.com/mda/corporateFax</a></li> <li><a href="urn:epcglobal:cbv:mda#state">urn:epcglobal:cbv:mda#state</a></li> <li><a href="urn:epcglobal:cbv:mda#postalCode">urn:epcglobal:cbv:mda#postalCode</a></li> <li><a href="urn:epcglobal:cbv:mda#countryCode">urn:epcglobal:cbv:mda#countryCode</a></li> <li><a href="http://epcis.tracelink.com/mda/AddressObjectGUID">http://epcis.tracelink.com/mda/AddressObjectGUID</a></li> <li><a href="http://epcis.tracelink.com/mda/HouseGUID">http://epcis.tracelink.com/mda/HouseGUID</a></li> <li><a href="http://epcis.tracelink.com/mda/partyRoleCode">http://epcis.tracelink.com/mda/partyRoleCode</a></li> <li><a href="http://epcis.tracelink.com/mda/premisesCode">http://epcis.tracelink.com/mda/premisesCode</a></li> <li><a href="http://epcis.tracelink.com/mda/taxRegistrationCode">http://epcis.tracelink.com/mda/taxRegistrationCode</a></li> </ul> |
|              |  |  |  |  |  |  | attribute(2) | 0...* | 0/* |               | String | <p><b>Required.</b> Looping Name/Value pairs identifying additional party identifier elements. This is the value element in the Name/Value pair attribute   <b>@id</b>. Stores additional party identifiers and identifier types defined by <b>@id</b>.<sup>1</sup></p> <p>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>Additional party identifier - optional (1 or more supported).</li> <li>Additional party identifier type - optional (1 or more supported).</li> </ul> <p>Create one instance of the Name/Value pair <b>attribute</b> and <b>@id</b> for each master data element returned.</p> <p>Additional party identifiers must be sent in a double attribute combination. The sequence must be:</p> <ul style="list-style-type: none"> <li>Attribute 1 identifies and provides the party identifier value.</li> <li>Attribute 2 identifies the party identifier type.</li> </ul> <p>For example:</p> <ul style="list-style-type: none"> <li> <pre>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue"&gt;10023141&lt;/attribute&gt; &lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode"&gt;DUNS_PLUS_FOUR&lt;/attribute&gt;</pre> </li> </ul>                                                                                                                                                                               |

<sup>1</sup>10023141



| Data Element |  |           |  |  |  |  |  |     |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|-----------|--|--|--|--|--|-----|--|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |           |  |  |  |  |  |     |  |               |        | <ul style="list-style-type: none"> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifier"&gt;10023141&lt;/attribute&gt;</code><br/> <code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifierType"&gt;DUNS4&lt;/attribute&gt;</code></li> </ul> <p>❗ If this sequence of double attributes is not followed for additional party identifiers, the additional party identifier will not be mapped to the TraceLink system and no error will be thrown.</p> <p>❗ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  |           |  |  |  |  |  | @id |  | 1...1<br>0/*  | String | <p><b>Conditionally required</b> if <b>attribute</b> is populated. Provides the name in the Name/Value pair attribute   <b>@id</b>. Identifies the master data value stored in the <b>attribute</b> value element, using urn or http prefix. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li><code>http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</code></li> <li><code>http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</code></li> </ul>                                                                                                                                                                                                                                                                                     |
| EPCISBody    |  |           |  |  |  |  |  |     |  | 1...1<br>-    | -      | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  | EventList |  |  |  |  |  |     |  | 1...1<br>-    | -      | <p><b>Required.</b> The <b>EventList</b> has the following structure:</p> <ul style="list-style-type: none"> <li><b>AggregationEvent:</b> Optional, looping, zero or more instances.</li> <li><b>ObjectEvent</b> Receipt: One instance for receiving event.</li> </ul> <p>Order of events in message if all events are present:</p> <ol style="list-style-type: none"> <li>Aggregation (optional)</li> <li>Receipt (mandatory)</li> </ol>                                                                                                                                                                                                                                                                                                                                                  |
|              |  | choice%1  |  |  |  |  |  |     |  | 1...*<br>-    | -      | <p><b>Required.</b> Only one of the following choice options may be selected in any one loop on EPCISBody   <b>EventList</b>:</p> <ul style="list-style-type: none"> <li><b>AggregationEvent</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup><http://epcis.tracelink.com/mda/additionalPartyIdentificationValue>

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|---------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                     |               |          | <ul style="list-style-type: none"> <li><b>ObjectEvent</b> (with receiving extensions)</li> </ul>                                                                                                                                                                                                                                                                                                           |
|              |  |  | AggregationEvent    | 0...*<br>-    | -        | <p><b>AggregationEvent</b> is option 1 for the <b>EventList</b> choice for the Aggregation events.<br/> <b>EventList = AggregationEvent</b> when all of the following is true:</p> <ul style="list-style-type: none"> <li><b>action</b> = <b>ADD</b></li> <li><b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:packing</b></li> <li><b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul> |
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>1</sup>                                                                                                                                                                                                                                              |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                        |
|              |  |  | parentID            | 1...1<br>1/*  | AnyURI   | <b>Required.</b> An Identifier of the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPC is of the case; for a case-to-pallet aggregation, the EPC is of the pallet). See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>3</sup>                                                                                                                  |
|              |  |  | childEPCs           | 1...1<br>-    | -        | <b>Required.</b> A list of identifiers, including the child items, in the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPCs is of the items; for a case-to-pallet aggregation, the EPCs is of the cases).                                                                                                                                                   |
|              |  |  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> The identifier of the child items in the parent container in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>4</sup>                                                                                                                                                                                                                         |
|              |  |  | action              | 1...1<br>1/*  | String   | <b>Required.</b> The action value must equal <b>ADD</b> for the aggregation event. <sup>5</sup>                                                                                                                                                                                                                                                                                                            |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:packing</b> . <sup>6</sup>                                                                                                                                                                                                                                                                                                                |
|              |  |  | disposition         | 0...1         | AnyURI   | The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>7</sup>                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>2013-10-01T22:10:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:088202.5503022.100000000670, urn:epc:id:sscc:088202.002000000034, <http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943>, <http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002><sup>4</sup>urn:epc:id:sgtin:088202.5503022.100000000670, urn:epc:id:sscc:088202.002000000034, <http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943>, <http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002><sup>5</sup>ADD<sup>6</sup>urn:epcglobal:cbv:bizstep:packing<sup>7</sup>urn:epcglobal:cbv:disp:in\_progress

| Data Element |  |  |  |                               | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|-------------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | readPoint                     | 0...1<br>-    | -       | Optional for <b>AggregationEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location of where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | bizLocation                   | 0...1<br>-    | -       | <b>Required.</b> Mandatory for <b>AggregationEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | id                            | 1...1<br>0/*  | AnyURI  | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -       | Extensions used for Aggregation Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | tl:packedStatus               | 0...1<br>0/*  | String  | The packout of the item or container using the supported enumeration values. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:quantity                   | 0...1<br>-    | Int     | The quantity of child serial numbers aggregated to the parent container in this aggregation. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:resetContainerAggregation  | 0...1<br>-    | Boolean | Reset container aggregation flag. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:extensionField             | 0...<br>*     | -       | Customer extension point to pass in one or more name/value pairs containing additional data attributes not already supported in this message.<br>These extensions are not stored by TraceLink and are used only for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message, such as when a CMO is required to provide additional data fields to the Pharmaceutical Manufacturer. In this case, TraceLink would have a custom map for that trade partner to map these fields outbound. Different trade partners may have different field requirements and may therefore require that <b>tl:extensionField</b> be populated differently per trade partner.<br>If this element group is populated, both the <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated. |
|              |  |  |  | tl:fieldName                  | 1...1<br>1/*  | String  | <b>Conditionally required</b> if <b>tl:ExtensionField</b> is present. Populate with the field name provided by the trade partner receiving the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>urn:epc:id:sgln:1100001.12345.0<sup>2</sup>urn:epc:id:sgln:1100001.12345.0<sup>3</sup>FULL<sup>4</sup>48<sup>5</sup>false

| Data Element |  |  |             |                     |               | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|--|-------------|---------------------|---------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |             |                     |               |               |          | mapped outbound message. The field name must match the field name provided by the trade partner exactly, including case, so that it can be properly detected in the outbound mapping.                                                                                                                                                              |
|              |  |  |             |                     | tl:fieldValue | 1...1<br>1/*  | String   | <b>Conditionally required</b> if <b>tl:ExtensionField</b> is present. Populate with the field value content that corresponds to <b>tl:fieldName</b> .                                                                                                                                                                                              |
|              |  |  | ObjectEvent |                     |               | 1...1<br>-    | -        | <b>Required. EventList.</b> Data = <b>ObjectEvent</b> for Receipt Event.<br>Define <b>ReceivingEvent</b> with: <ul style="list-style-type: none"> <li>• <b>action</b> = <b>OBSERVE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:receiving</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul> |
|              |  |  |             | eventTime           |               | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>1</sup>                                                                                                                                                                                      |
|              |  |  |             | eventTimeZoneOffset |               | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect at time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                |
|              |  |  |             | epcList             |               | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of top-most containers (e.g. pallets, cases) in the shipment.                                                                                                                                                                                                                                                    |
|              |  |  |             | epc                 |               | 1...*<br>1/*  | String   | <b>Required.</b> The identifier of the child items in the parent container in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>3</sup>                                                                                                                                                                 |
|              |  |  |             | action              |               | 1...1<br>0/*  | String   | <b>Required.</b> The <b>action</b> value must equal <b>OBSERVE</b> . <sup>4</sup>                                                                                                                                                                                                                                                                  |
|              |  |  |             | bizStep             |               | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:receiving</b> . <sup>5</sup>                                                                                                                                                                                                                                     |
|              |  |  |             | disposition         |               | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>6</sup>                                                                                                                                                                                                                                  |

<sup>1</sup>2013-10-01T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sgtin:068202.0401034.11220207026272, urn:epc:id:sscc:030944.10105363280, http://epcis.tracelink.com/obj/cn-edmc/88102321100002005943, http://epcis.tracelink.com/obj/ntin/4150.001647778.100000000002<sup>4</sup>OBSERVE<sup>5</sup>urn:epcglobal:cbv:bizstep:receiving<sup>6</sup>urn:epcglobal:cbv:disp:in\_progress

| Data Element |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | readPoint          | 0...1<br>-    | -      | <b>Required.</b> The location where the event occurred, i.e. the warehouse GLN location ID and storage location (shelf, bin, etc.) in URN format, that recorded the Object event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | bizTransactionList | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:shipping</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | bizTransaction     | 1...*<br>0/*  | AnyURI | <p><b>Required.</b> This field is the business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or invoice and/or purchase order governing this shipment, which are subject to Section 8.4.2 of (CBV1.0). The GLN that occurs after <code>urn:epcglobal:cbv:bt:</code> is the GLN of the party that issued the number (e.g. if customer issues PO Number, customer GLN is entered. If supplier issues ASN/delivery number supplier GLN is entered).<sup>2</sup></p> <div>  A delivery number or ASN is mandatory. All other transaction types are optional. </div> <p>The transaction number requirements vary by region. It is recommended that the following are always provided, when available, to fulfill compliance needs:</p> <ul style="list-style-type: none"> <li>• Purchase Order Number</li> <li>• Invoice Number</li> <li>• ASN</li> </ul> |
|              |  |  | @type              | 1...1<br>1/*  | String | <p><b>Required.</b> The transaction identifier type using the supported enumeration values (e.g. PO, ASN, RETURN).<sup>3</sup></p> <p>Mandatory if <b>cmn:TransactionIdentifier</b> is populated. A delivery number or ASN is mandatory. All other transaction types are optional.</p> <p>See the <a href="#">TransactionId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | @date              | 0...1<br>0/*  | Date   | <b>Required.</b> The transaction identifier date. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | extension          | 0...1<br>-    | -      | <p>Main extension body for receipt event.</p> <div>  Source and Destination lists are optional even if party address master data is stored in the <b>VocabularyElement</b> in the </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

<sup>1</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>2</sup>urn:epcglobal:cbv:bt:0614141000029:9847856<sup>3</sup>urn:epcglobal:cbv:btt:desadv<sup>4</sup>2019-03-30

| Data Element |  |  |  |  |                 | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|-----------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                 |               |        | EPCISMasterData extension in the message header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | sourceList      | 0...1<br>-    | -      | <p><b>Required.</b><br/>Source list identifies sending business, location, and carrier parties. <b>sourceList</b> supports one of two functions:</p> <ol style="list-style-type: none"> <li><b>VocabularyElement</b> is populated with party address master data: <b>sourceList</b> identifies sold-from, ship-from, or carrier party. Party master data is mapped from <b>VocabularyElement</b>.</li> <li><b>VocabularyElement</b> is not populated with party address master data: <b>sourceList</b> party identifiers used for master data lookup in the backend.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | source          | 1...*<br>0/*  | String | <p><b>Required.</b> Source party identifier for sold-from, ship-from, or carrier parties. Party identifier in source either:<sup>1</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-from, ship-from, or carrier party in populated <b>VocabularyElement</b>. Party address info is mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in sourceList   <b>source</b> and <b>VocabularyElement</b>   <b>@id</b>.</li> <li><b>sourceList/source</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is not populated or there is no match between party identifiers in <b>source</b> and <b>VocabularyElement</b>   <b>@id</b>. If ship-from party the same as sold-from party, ship-from identifier does not need to be sent.</li> </ol> <p> If the ship-from party is the same as the sold-from party, the ship-from identifier does not need to be sent.</p> |
|              |  |  |  |  | @type           | 1...*<br>0/*  | String | <p><b>Required.</b> Type of source party identifier, i.e. owning (sold-from), location (ship-from), or carrier party. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Sold-from party = <a href="#">urn:epcglobal:cbv:sdt:owning_party</a> Mandatory.</li> <li>Ship-from party = <a href="#">urn:epcglobal:cbv:sdt:location</a> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | destinationList | 0...1<br>-    | -      | <p><b>Required.</b><br/>Destination list identifies receiving business or location parties identified in header extensions level.</p> <p><b>destinationList</b> supports one of two functions:</p> <ol style="list-style-type: none"> <li><b>VocabularyElement</b> populated with party address master data: <b>destinationList</b> identifies sold-to, ship-to parties. Party master data mapped from <b>VocabularyElement</b>.</li> <li><b>VocabularyElement</b> NOT populated with party address master data: <b>destinationList</b> party identifiers used for</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0<sup>2</sup>urn:epcglobal:cbv:sdt:owning\_party

| Data Element |  |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|-----------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                             |               |        | master data lookup in backend.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | destination                 | 1...*<br>0/*  | String | <p><b>Required.</b> Destination party identifier for sold-to or ship-to parties. Party identifier in destination either:<sup>1</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-to or ship-to parties in populated <b>VocabularyElement</b>. Party address info mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in destinationList   <b>destination</b> and VocabularyElement   <b>@id</b>.</li> <li>destinationList   <b>destination</b> supports master data lookup in the TraceLink system. <b>VocabularyElement</b> is NOT populated or there is NO match between party identifiers in <b>destination</b> and VocabularyElement   <b>@id</b>.</li> </ol> <div>  If ship-to party the same as sold-to party, ship-to identifier does not need to be included.         </div> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  |  | @type                       | 1...1<br>0/*  | String | <p><b>Required.</b> Identifies type of destination party identifier, i.e. owning (sold-to) or location (ship-to) party. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Sold-to party = <code>urn:epcglobal:cbv:sdt:owning_party</code> (mandatory).</li> <li>Ship-to party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from <b>owning_party</b>).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  | tl:receivingEventExtensions | 0...1<br>-    | -      | Receiving event with list of serial numbers being received from supplier's shipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:transactionDate          | 1...1<br>-    | Date   | <b>Required.</b> Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | tl:shipToCountryCode        | 1...1<br>2/2  | String | <p><b>Required.</b> 2 letter ISO country code for ship to country. This value is referenced to advise regulatory reporting if it is mandatory for the specified country market.<sup>4</sup></p> <p>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink system.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | tl:shipFromCountryCode      | 0...1<br>2/2  | String | <p>2 letter ISO country code for ship from country. This value is referenced to advise regulatory reporting if it is mandatory for the specified country market.<sup>5</sup></p> <p>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in the TraceLink system.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup>urn:epc:id:sgln:033333.101365.0<sup>2</sup>urn:epcglobal:cbv:sdt:owning\_party<sup>3</sup>2013-09-30<sup>4</sup>US<sup>5</sup>US

| Data Element |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|----------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:receiptDistributionType | 1...1<br>1/*  | String | <b>Required.</b> Informs what types of regulatory reporting may be triggered based on the nature of the transaction: a purchase, transfer, or return within the same country or a purchase, transfer, or return from another country. <sup>1</sup><br>See the <a href="#">SalesDistType</a> enumeration list for valid values.                                                                                                                                                                                                                 |
|              |  |  |  | tl:supplyType              | 0...1         | String | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> and <b>tl:salesDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b> .<br>All values except for <b>Collection</b> apply. Identifies the type of supply that is being performed using one of the permitted values. <sup>2</sup><br>See the <a href="#">SupplyType</a> enumeration list for valid values.                                                                                                                                                   |
|              |  |  |  | tl:contractType            | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> and <b>tl:salesDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b> .<br>Identifies the type of contract for the sale of goods using one of the permitted values. <sup>3</sup><br>See the <a href="#">ContractType</a> enumeration list for valid values.                                                                                                                                                                                                |
|              |  |  |  | tl:comments                | 0...1<br>0/*  | String | Optional remarks or comments associated with delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:contractNumber          | 0...1<br>0/*  | String | Identification number of the contract. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | tl:fundingSource           | 0...1<br>0/*  | String | <b>Required.</b> Source of the funding. <sup>5</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | tl:transferWithoutShipment | 0...1<br>0/*  | String | Indicates that the serial numbers are already in an Available state because there is no associated shipment event. Valid values: <ul style="list-style-type: none"> <li><b>true</b> – Serial numbers are in the Available state</li> <li><b>false</b> – (default) Serial numbers are in the Pending Receipt state.</li> </ul> <div>  Only use this element when <b>tl:receiptDistributionType</b> = <b>INCOUNTRYTRANSFER</b> or <b>IMPORTTRANSFER</b>. </div> |
|              |  |  |  | tl:entryPort               | 0...1<br>0/*  | String | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:exitPort                | 0...1<br>0/*  | String | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>INCOUNTRYSALE<sup>2</sup>PatientDistribution<sup>3</sup>CompetitiveBid<sup>4</sup>1234567<sup>5</sup>FederalBudgetFunds



| Data Element |  |  |  |                           | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|---------------------------|----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:deliveryInspection     | 0...1<br>0/*   | String | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                                                                                                      |
|              |  |  |  | tl:deliveryInspectionDate | 0...1<br>10/10 | Date   | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:deliveryInspectionNote | 0...1<br>0/*   | String | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                                                                                                      |
|              |  |  |  | tl:removalFromCirculation | 0...1<br>0/*   | String | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                                                                                                |
|              |  |  |  | tl:aggregationInspection  | 0...1<br>0/*   | String | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                                                                                                 |
|              |  |  |  | tl:orderItemList          | 0...1<br>-     | -      | Order item list group is populated to communicate the pick quantities for each item code at the EACH (unit) level.                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:orderItem              | 1...*<br>-     | -      | <b>Required.</b> Order item group is a repeating element that captures the item code, lot number and quantity for each item in the order. Each unique item code and lot number are communicated in a separate order item group.                                                                                                                                          |
|              |  |  |  | tl:orderItemNumber        | 0...1<br>0/*   | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                                                                                                                                                                             |
|              |  |  |  | choice%1                  | -<br>-         | -      | <b>Conditionally required</b> if <b>tl:shipFromCountryCode = KR</b> . Populate only one of <b>cmn:InternalMaterialCode</b> or <b>cmn:PackagingItemCode</b> . One of the two options must be present.<br><br>Populate only one of <b>tl:InternalMaterialCode</b> , <b>tl:PackagingItemCode</b> , or <b>tl:countryDrugCode</b> . One of the three options must be present. |
|              |  |  |  | tl:internalMaterialCode   | 0...1<br>1/*   | String | <b>Conditionally required</b> if neither <b>tl:packagingItemCode</b> nor <b>tl:countryDrugCode</b> is present. Option 1 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the internal material number configured in Product Master Data. <sup>2</sup>                                                                                         |
|              |  |  |  | tl:packagingItemCode      | 0...1<br>0/*   | String | <b>Conditionally required</b> if neither <b>tl:internalMaterialCode</b> nor <b>tl:countryDrugCode</b> is present. Option 2 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>3</sup>                                                                      |
|              |  |  |  | @type                     | 0...1<br>0/*   | String | <b>Required.</b> The product code type for the packaging item code using the supported enumeration values (e.g. GTIN-14).                                                                                                                                                                                                                                                |

<sup>1</sup>2021-12-21<sup>2</sup>100234<sup>3</sup>00882025030223

| Data Element |  |  |  |  |  |  |                             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|--|-----------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                             |               |         | See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                                            |
|              |  |  |  |  |  |  | tl:countryDrugCode          | 0...1<br>0/*  | String  | <b>Conditionally required</b> if neither <b>tl:internalMaterialCode</b> nor <b>tl:packagingItemCode</b> is present. Option 3 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the country drug code configured in Product Master Data. <sup>1</sup> |
|              |  |  |  |  |  |  | @type                       | 0...1<br>0/*  | String  | <b>Required.</b> The national drug code type using the supported enumeration values (e.g. US_NDC442).<br>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                            |
|              |  |  |  |  |  |  | cbvmdata:lotNumber          | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> and <b>tl:isSerialized</b> = <b>false</b> . The lot or batch code for the items to be picked (if available) in an alphanumeric string. <sup>2</sup>                                                 |
|              |  |  |  |  |  |  | cbvmdata:itemExpirationDate | 0...1<br>1/*  | Date    | The expiration date for the serialized item in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | tl:quantity                 | 1...1<br>0/*  | String  | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> and <b>tl:isSerialized</b> = <b>false</b> . The quantity of items at the EACH (unit) level of the item code and lot if specified to be picked. <sup>4</sup>                                         |
|              |  |  |  |  |  |  | tl:unitPrice                | 0...1<br>0/*  | Decimal | <b>Required.</b> Unit price of item. <sup>5</sup>                                                                                                                                                                                                                              |
|              |  |  |  |  |  |  | @currencyCode               | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>6</sup>                                                                                                                                                                                                    |
|              |  |  |  |  |  |  | tl:vat                      | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>7</sup>                                                                                                                                                                                                                                         |
|              |  |  |  |  |  |  | @currencyCode               | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>8</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                          |
|              |  |  |  |  |  |  | tl:grossPrice               | 0...1<br>-    | Decimal | Gross price including unit price and all taxes and fees. <sup>9</sup>                                                                                                                                                                                                          |

<sup>1</sup>0069-4220-66<sup>2</sup>A12345<sup>3</sup>2017-12-31<sup>4</sup>50<sup>5</sup>35.67<sup>6</sup>USD<sup>7</sup>152.22<sup>8</sup>USD<sup>9</sup>152.22

| Data Element |  |  |  |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|--|--|---------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | @currencyCode             | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>1</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                                                                                         |
|              |  |  |  |  |  |  | tl:isSerialized           | 0...1<br>0/*  | Boolean | Indicates if item is not serialized. If omitted, defaults to <code>true</code> . <sup>2</sup>                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | tl:transactionIdentifier  | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>3</sup>                                                                                                                                                                                                                  |
|              |  |  |  |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><code>DESTRUCTION</code></li> <li><code>INVOICE</code></li> <li><code>NOTAFISCAL</code></li> <li><code>OTHER</code></li> <li><code>PO</code></li> <li><code>RETURN</code></li> </ul>                                                   |
|              |  |  |  |  |  |  | @date                     | 0...1<br>0/*  | Date    | <b>Conditionally required</b> if <code>tl:shipToCountryCode</code> = <code>RU</code> . The transaction identifier date. <sup>4</sup>                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | tl:warehouseOperatorName  | 0...1<br>0/*  | String  | Name of the person responsible for warehouse operations.                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  |  | tl:correctiveReceipt      | 0...1<br>0/*  | Boolean | Indicates that a new Serialized Operations Manager receipt is correcting a previously voided Serialized Operations Manager receipt. Valid values: <ul style="list-style-type: none"> <li><code>false</code> – (default) The receipt is not a corrective receipt.</li> <li><code>true</code> – The receipt is a corrective receipt.</li> </ul> |
|              |  |  |  |  |  |  | tl:originalDeliveryNumber | 0...1<br>0/*  | String  | Original delivery number. Records the original delivery number that is replaced when a receipt is voided and corrections are made to that receipt.                                                                                                                                                                                            |

## Example

<sup>1</sup>USD<sup>2</sup>true<sup>3</sup>PO303005<sup>4</sup>2019-03-30

```

<?xml version="1.0" encoding="UTF-8"?>
<epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda" xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:gslushc="http://epcis.gslus.org/hc/ns" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2017-08-31T17:45:20.0Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8887771013655</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>2019082106310032</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-07-25T15:39:53Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
    <extension>
      <EPCISMasterData>
        <VocabularyList>
          <Vocabulary type="urn:epcglobal:epcis:vtype:Location">
            <VocabularyElementList>
              <VocabularyElement id="urn:epc:id:sgln:9997777.01994.0">
                <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>
                <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">712333444</attribute>
                <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
                <attribute
id="http://epcis.tracelink.com/mda/partyRoleCode">MANUFACTURER</attribute>
                <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
                <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
                <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
              </VocabularyElement>
            </VocabularyElementList>
          </Vocabulary>
        </VocabularyList>
      </EPCISMasterData>
    </extension>
  </EPCISHeader>
</epcis:EPCISDocument>

```

```

        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
    <VocabularyElement id="urn:epc:id:sgln:9297187.01994.0">
        <attribute id="urn:epcglobal:cbv:mda#name">Watson Wholesaler</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">512333444</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
        <attribute
id="http://epcis.tracelink.com/mda/businessClassification">WHOLESALE</attribute>
        <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">555 Neelan Road</attribute>
        <attribute id="urn:epcglobal:cbv:mda#city">Sacramento</attribute>
        <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
        <attribute id="urn:epcglobal:cbv:mda#state">CA</attribute>
        <attribute id="urn:epcglobal:cbv:mda#postalCode">95833</attribute>
        <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
        <attribute id="http://epcis.tracelink.com/mda/AddressObjectGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/HouseGUID"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/partyRoleCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
        <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
    </VocabularyElement>
</VocabularyElementList>
</Vocabulary>

```

```

        </VocabularyList>
    </EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <AggregationEvent>
            <eventTime>2019-09-25T00:12:23.8Z</eventTime>
            <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
            <parentID>urn:epc:id:sscc:005434.40000000021</parentID>
            <childEPCs>
                <epc>urn:epc:id:sgtin:068202.0401034.11220207024596</epc>
                <epc>urn:epc:id:sgtin:068202.0401034.11220207024597</epc>
            </childEPCs>
            <action>ADD</action>
            <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
            <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:8887777.01384.0</id>
            </readPoint>
            <bizLocation>
                <id>urn:epc:id:sgln:8887777.01384.0</id>
            </bizLocation>
        </AggregationEvent>
        <!-- Receiving -->
        <ObjectEvent>
            <eventTime>2019-09-25T00:12:23.8Z</eventTime>
            <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
            <epcList>
                <epc>urn:epc:id:sscc:005434.40000000020</epc>
            </epcList>
            <action>OBSERVE</action>
            <bizStep>urn:epcglobal:cbv:bizstep:receiving</bizStep>
            <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:8887777.01384.0</id>
            </readPoint>
            <bizLocation>
                <id>urn:epc:id:sgln:8887777.01384.0</id>
            </bizLocation>
        </ObjectEvent>
    </EventList>
</EPCISBody>
</EPCIS>

```

```

    </bizLocation>
    <bizTransactionList>
      <bizTransaction type="urn:epcglobal:cbv:btt:desadv" date="2019-09-
25">urn:epcglobal:cbv:bt:8779891013658:987654321</bizTransaction>
      <bizTransaction type="urn:epcglobal:cbv:btt:po" date="2019-09-
25">urn:epcglobal:cbv:bt:9297187019944:4747880013</bizTransaction>
      <bizTransaction type="urn:epcglobal:cbv:btt:inv" date="2019-09-
25">urn:epcglobal:cbv:bt:9997777019940:987654321</bizTransaction>
    </bizTransactionList>
    <extension>
      <sourceList>
        <source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:9997777.01994.0</source>
      </sourceList>
      <destinationList>
        <destination type="urn:epcglobal:cbv:sdt:owning_
party">urn:epc:id:sgln:9297187.01994.0</destination>
      </destinationList>
    </extension>
    <tl:receivingEventExtensions>
      <tl:transactionDate>2019-07-25</tl:transactionDate>
      <tl:shipToCountryCode>US</tl:shipToCountryCode>
      <tl:shipFromCountryCode>US</tl:shipFromCountryCode>
      <tl:receiptDistributionType>INCOUNTRYTRANSFER</tl:receiptDistributionType>
      <tl:supplyType>MedicalCareDistribution</tl:supplyType>
      <tl:contractType>PrivateContract</tl:contractType>
      <tl:contractNumber>C102</tl:contractNumber>
      <tl:fundingSource>OwnFunds</tl:fundingSource>
      <tl:transferWithoutShipment>false</tl:transferWithoutShipment>
      <tl:entryPort></tl:entryPort>
      <tl:exitPort></tl:exitPort>
      <tl:epcOrderItemDetails>
        <tl:epcOrderItemList orderItemNumber="15">
          <tl:epcOrderItem>urn:epc:id:sscc:005434.400000000021</tl:epcOrderItem>
        </tl:epcOrderItemList>
      </tl:epcOrderItemDetails>
      <tl:orderItemList>
        <tl:orderItem>
          <tl:orderItemNumber>15</tl:orderItemNumber>
          <tl:packagingItemCode type="GTIN-14">00992326050107</tl:packagingItemCode>

```

```

        <cbvmdata:lotNumber>L120012</cbvmdata:lotNumber>
        <cbvmdata:itemExpirationDate>2029-07-25</cbvmdata:itemExpirationDate>
        <tl:quantity>5</tl:quantity>
        <tl:unitPrice currencyCode="USD">89.55</tl:unitPrice>
        <tl:vat currencyCode="USD">10.45</tl:vat>
        <tl:grossPrice currencyCode="USD">100.00</tl:grossPrice>
        <tl:isSerialized>true</tl:isSerialized>
        <tl:transactionIdentifier type="PO" date="2019-03-30">TI007</tl:transactionIdentifier>
    </tl:orderItem>
</tl:orderItemList>
<tl:warehouseOperatorName>Patrick Murphy</tl:warehouseOperatorName>
<tl:correctiveReceipt>false</tl:correctiveReceipt>
<tl:originalDeliveryNumber>False9022413</tl:originalDeliveryNumber>
</tl:receivingEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                        | Error Message                                                  | Description                                                                                   |
|-----------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Class 1                                             |                                                                |                                                                                               |
| sbdh:Sender   sbdh:Identifier   <b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!              | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| sbdh:Receiver   sbdh:Identifier   <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!            | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement                                   | Sold from party identifier is required !!!                     | The error occurs if sold from party does not exist as a VocabularyElement   <b>@id</b> .      |
| VocabularyElement   <b>@id</b>                      | Valid sold from business party identifier type is required !!! | The error occurs if the source is present, but there is no matching entry in the lookup file. |



| Data Element                         | Error Message                                                                   | Description                                                                                   |
|--------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| VocabularyElement   <b>attribute</b> | Sold from business party name is required !!!                                   | The error occurs if the source is empty or null.                                              |
|                                      | Party type is required if additional business party identifier is populated !!! | The error occurs if additionalIdentifier is populated, but the source is empty or null.       |
|                                      | Valid sold from business party identifier type is required !!!                  | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                                      | Valid business classification code is required !!!                              | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                                      | Sold from business party street address is required !!!                         | The error occurs if the source is empty or null.                                              |
|                                      | Sold from business party city is required !!!                                   | The error occurs if the source is empty or null.                                              |
|                                      | 3-digit numeric District code required for country India !!!                    | The error occurs if country= IN, but district is not a 3-digit numeric code.                  |
|                                      | Sold from business party state or region is required !!!                        | The error occurs if the source is empty or null.                                              |
|                                      | Sold from business party country is required !!!                                | The error occurs if the source is empty or null.                                              |
|                                      | Valid Sold from business party country is required !!!                          | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement                    | Ship from party info required in VocabularyElement if present in sourceList !!! | The error occurs if ship from is present in sourceList, but not in VocabularyElement.         |
| VocabularyElement   <b>@id</b>       | Valid ship from business party identifier type is required !!!                  | The error occurs if the source is present, but there is no matching entry in the lookup file. |

| Data Element                         | Error Message                                                                      | Description                                                                                   |
|--------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| VocabularyElement   <b>attribute</b> | Ship from business party name is required !!!                                      | The error occurs if the source is empty or null.                                              |
|                                      | Party type is required if additional facility identifier is populated !!!          | The error occurs if additionalIdentifier is populated, but the source is empty or null.       |
|                                      | Valid ship from location identifier type is required !!!                           | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                                      | Ship from location street address is required !!!                                  | The error occurs if the source is empty or null.                                              |
|                                      | Ship from location city is required !!!                                            | The error occurs if the source is empty or null.                                              |
|                                      | Ship from location state or region is required !!!                                 | The error occurs if the source is empty or null.                                              |
|                                      | Ship from location country is required !!!                                         | The error occurs if the source is empty or null.                                              |
|                                      | Valid Ship from location country is required !!!                                   | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement                    | Sold to party identifier is required !!!                                           | The error occurs if ship to is present in destinationList, but not in the source.             |
| VocabularyElement   <b>@id</b>       | Valid sold to business party identifier type is required !!!                       | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement   <b>attribute</b> | Sold to business party name is required !!!                                        | The error occurs if the source is empty or null.                                              |
|                                      | Valid sold to business party identifier type is required !!!                       | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                                      | Sold to business party street address is required !!!                              | The error occurs if the source is empty or null.                                              |
|                                      | Sold to business party city is required !!!                                        | The error occurs if the source is empty or null.                                              |
|                                      | Sold to business party state or region is required !!!                             | The error occurs if the source is empty or null.                                              |
|                                      | Sold to business party country is required !!!                                     | The error occurs if the source is empty or null.                                              |
|                                      | Valid Sold to business party country is required !!!                               | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement                    | Ship to party info required in VocabularyElement if present in destinationList !!! | The error occurs if ship to is present in destinationList, but not in the source.             |
| VocabularyElement   <b>@id</b>       | Valid ship to business party identifier type is required !!!                       | The error occurs if the source is present, but there is no matching entry                     |

| Data Element                         | Error Message                                                                 | Description                                                                                   |
|--------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|                                      |                                                                               | in the lookup file.                                                                           |
| VocabularyElement   <b>attribute</b> | Ship to business party name is required !!!                                   | The error occurs if the source is empty or null.                                              |
|                                      | Valid ship to location identifier type is required !!!                        | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                                      | Ship to location street address is required !!!                               | The error occurs if the source is empty or null.                                              |
|                                      | Ship to location city is required !!!                                         | The error occurs if the source is empty or null.                                              |
|                                      | Ship to location state or region is required !!!                              | The error occurs if the source is empty or null.                                              |
|                                      | Ship to location country is required !!!                                      | The error occurs if the source is empty or null.                                              |
|                                      | Valid Ship to location country is required !!!                                | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement                    | Carrier party info required in VocabularyElement if present in sourceList !!! | The error occurs if carrier party is present in sourceList, but not in VocabularyElement.     |
| VocabularyElement   <b>@id</b>       | Valid carrier business party identifier type is required !!!                  | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| VocabularyElement   <b>attribute</b> | Carrier business party name is required !!!                                   | The error occurs if the source is empty or null.                                              |
|                                      | Valid carrier business party identifier type is required !!!                  | The error occurs if the source is present, but there is no matching entry in the lookup file. |
|                                      | Carrier business party street address is required !!!                         | The error occurs if the source is empty or null.                                              |
|                                      | Carrier business party city is required !!!                                   | The error occurs if the source is empty or null.                                              |
|                                      | Carrier business party state or region is required !!!                        | The error occurs if the source is empty or null.                                              |
|                                      | Carrier business party country is required !!!                                | The error occurs if the source is empty or null.                                              |
|                                      | Valid Carrier business party country is required !!!                          | The error occurs if the source is present, but there is no matching entry in the lookup file. |
| choice                               | At least one object event for receiving is required !!!                       | The error occurs if the source is empty or null.                                              |

| Data Element                                           | Error Message                                                                            | Description                                                                                                |
|--------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| AggregationEvent   <b>parentID</b>                     | Invalid EPC format !!!                                                                   | The error occurs if the value cannot be translated.                                                        |
|                                                        | Serial number in source epc is required !!!                                              | The error occurs if the source is empty or null.                                                           |
|                                                        | Invalid EPC format !!!                                                                   | The error occurs if the source is invalid.                                                                 |
| childEPCs   <b>epc</b>                                 | Invalid EPC format !!!                                                                   | The error occurs if the source is invalid or cannot be translated.                                         |
| AggregationEvent   <b>bizStep</b>                      | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!       | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing" for a aggregation event. |
| AggregationEvent   <b>disposition</b>                  | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!!  | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".                        |
| bizLocation   <b>id</b>                                | Event location in the aggregation event is required !!!                                  | The error occurs if the source is empty or null.                                                           |
| tl:extensionField   <b>tl:fieldName</b>                | Field name is required if ExtensionField group present in source !!!                     | The error occurs if tl:extensionField group is populated, but the source is empty or null.                 |
| tl:extensionField   <b>tl:fieldValue</b>               | Field value is required if ExtensionField group present in source !!!                    | The error occurs if tl:extensionField group is populated, but the source is empty or null.                 |
| ObjectEvent (Receiving Events)                         | Receiving event data is required !!!                                                     | The error occurs if the required source is missing or null.                                                |
|                                                        | Only one receiving event is required !!!                                                 | The error occurs if more than one receiving event is present.                                              |
| epcList   <b>epc</b>                                   | Invalid EPC format !!!                                                                   | The error occurs if the source is invalid or cannot be translated.                                         |
| ObjectEvent (Receiving Events)   <b>bizStep</b>        | bizStep urn:epcglobal:cbv:bizstep:receiving is required for ObjectEvent receiving !!!    | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:receiving" for a receiving event. |
| ObjectEvent (Receiving Events)   <b>disposition</b>    | Disposition urn:epcglobal:cbv:disp:in_progress is required for ObjectEvent receiving !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress".                        |
| ObjectEvent (Receiving Events)   readPoint   <b>id</b> | Event location in the receiving event is required !!!                                    | The error occurs if the source is empty or null.                                                           |
| bizTransactionList                                     | Biz transaction list is required in receiving event !!!                                  | The error occurs if the source is empty or null.                                                           |
| bizTransaction   <b>@type</b>                          | Valid bizTransaction type is required if bizTransaction is populated !!!                 | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.        |

| Data Element                 | Error Message                                                         | Description                                                                                                                       |
|------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| source                       | Valid sold-from business lookup identifier type is required !!!       | The error occurs if the source is invalid.                                                                                        |
|                              | Valid ship-from business lookup identifier type is required !!!       | The error occurs if the source is invalid.                                                                                        |
|                              | Valid carrier business lookup identifier type is required !!!         | The error occurs if the source is invalid.                                                                                        |
| destination                  | Valid sold-to business lookup identifier type is required !!!         | The error occurs if the source is invalid.                                                                                        |
|                              | Valid ship-to business lookup identifier type is required !!!         | The error occurs if the source is invalid.                                                                                        |
| tl:receivingEventExtensions  | receivingEventExtensions required if receiving event populated !!!    | The error occurs if the source is empty or null.                                                                                  |
| tl:shipToCountryCode         | Valid ISO country code for ship-to country is required !!!            | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                               |
| tl:shipFromCountryCode       | Valid ISO country code is required !!!                                | The error occurs if the source is present, but there is no matching entry in the lookup file.                                     |
|                              | Ship from country for import products is required !!!                 | The error occurs if ReceiptDistributionType = "IMPORTSALE", "IMPORTTRANSFER", or "IMPORTRETURN", but the source is empty or null. |
| tl:receiptDistributionType   | Valid receipt distributionType is required !!!                        | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                               |
| choice1                      | One of internalMaterialCode or packagingItemCode is required !!!      | The error occurs if both tl:internalMaterialCode and tl:packagingItemCode are empty or null.                                      |
| tl:packagingItemCode   @type | Packaging item code type is required !!!                              | The error occurs if tl:packagingItemCode is populated, but the source is empty or null.                                           |
| tl:unitPrice   @currencyCode | Valid ISO currency code is required !!!                               | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                               |
| tl:warehouseOperatorName     | Warehouse operator name for China product is required !!!             | The error occurs if epcList   <b>epc</b> = "http://epcis.tracelink.com/obj/cn-edmc/", but source is empty or null.                |
| <b>Class 2</b>               |                                                                       |                                                                                                                                   |
| bizTransaction   @date       | Transaction Identifier Date is required if Ship To Country Code = RU. | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                  |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                  | Description                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| tl:shipToCountryCode                                                                                                                                              | Serialized Operations Manager Receipt inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified. | The error occurs if the sourceList and destinationList are both omitted, and tl:shipToCountryCode and tl:ShipFromCountrycode are empty or null. |
| tl:shipFromCountryCode                                                                                                                                            |                                                                                                                                                                                                                |                                                                                                                                                 |
| tl:fundingSource                                                                                                                                                  | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU.                                                                                                                     | The error occurs if both tl:shipToCountryCode and tl:shipFromCountryCode = "RU", but the source is empty or null.                               |
| tl:unitPrice                                                                                                                                                      | Unit Price is required if Ship To Country Code is RU and Ship From Country Code is any of RU, AM, BY, KZ, KG.                                                                                                  | The error occurs if tl:shipToCountryCode = "RU" and tl:shipFromCountryCode = "AM", "BY", "KG", "KZ", or "RU", but the source is empty or null.  |
| tl:transactionIdentifier   @date                                                                                                                                  | Order Item Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                                               | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                                |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                |                                                                                                                                                 |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                |                                                                                                                                                 |

## ESM Receipt (XML)

### Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_ESM\_RECEIPT

**Info Exchange Display Name:** ESM Receipt

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element          |                       |                        | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                     |
|-----------------------|-----------------------|------------------------|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| som:SOMReceiptMessage |                       |                        | 1...1<br>-     | -      | <b>Required.</b> Root element of message.                                                                                                                                                                                                                                                                       |
|                       | som:ControlFileHeader |                        | 1...1<br>-     | -      | <b>Required.</b> The message document's header information.                                                                                                                                                                                                                                                     |
|                       |                       | cmn:FileSenderNumber   | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup>                                                                                                                                                                                                                                      |
|                       |                       | cmn:FileReceiverNumber | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's recipient. <sup>2</sup>                                                                                                                                                                                                                                   |
|                       |                       | cmn:FileControlNumber  | 1...1<br>1/20  | String | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>3</sup>                                                                                                                                                                              |
|                       |                       | cmn:FileDate           | 1...1<br>10/10 | Date   | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>4</sup>                                                                                                                                                                                            |
|                       |                       | cmn:FileTime           | 1...1<br>9/9   | Time   | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the <u>Z</u> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <u>Z</u> . <sup>5</sup>                                                                      |
|                       | som:MessageBody       |                        | 1...1<br>-     | -      | <b>Required.</b> Main body of the message.                                                                                                                                                                                                                                                                      |
|                       |                       | cmn:LocationId         | 1...1<br>0/34  | String | Specifies the facility or warehouse identifier to scope the Sales Shipment Status update for the serial numbers matching the specified item code and lot number. <sup>6</sup><br>If the location is omitted, the Sales Shipment status update is applied globally to all matching serial numbers in the system. |
|                       |                       | cmn:DeliveryNumber     | 1...1<br>1/*   | String | <b>Required.</b> Links the order information to the serialized receive information for this customer delivery. <sup>7</sup>                                                                                                                                                                                     |

<sup>1</sup>8888882028655<sup>2</sup>8888882028677<sup>3</sup>0000000001<sup>4</sup>2012-06-30<sup>5</sup>06:30:32Z<sup>6</sup>8888882028655<sup>7</sup>4520010

| Data Element |  |  |                            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|----------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:DeliveryCompleteFlag   | 1...1<br>1/*  | Boolean | <p><b>Required.</b> Instructs TraceLink to process the outbound delivery, update the status of all serial numbers and child aggregations to be shipped, and trigger generation of regulatory reporting messages based on customer configuration.<sup>1</sup></p> <p>If all of the information (order detail and received serial numbers) is in a single message, the delivery complete flag is set to <b>true</b>.</p> <p>If only partial information is in the message (e.g. order detail only, received items sent incrementally, etc.) the delivery complete flag is set to <b>false</b> for all intermediate messages, and then set to <b>true</b> when the delivery is complete and all information has been communicated to TraceLink.</p> <div>  Values must be lower case only. <b>True</b> or <b>TRUE</b> will throw an error.         </div> |
|              |  |  | cmn:RegisterUnknownSNs     | 0...1<br>0/*  | Boolean | <p>Determines if serial numbers that are not known to SOM should be registered or not. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b> – All serial numbers that do not currently exist in SOM are registered in the <b>Available</b> state.</li> <li><b>false</b> – All serial numbers that do not currently exist in SOM are rejected.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | som:OrderDetails           | 1...1<br>-    | -       | <p><b>Required.</b> Includes business transaction identifier and date, order item receive list, and sender and recipient information. This element is mandatory before the delivery complete flag can be set, though it can be communicated at any time (e.g. with, before, or after the received serial numbers have been communicated).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | cmn:CorrectiveReceipt      | 0...1<br>0/*  | Boolean | <p>Indicates that a new Serialized Operations Manager receipt is correcting a previously voided Serialized Operations Manager receipt. Valid values:</p> <ul style="list-style-type: none"> <li><b>false</b> – (default) The receipt is not a corrective receipt.</li> <li><b>true</b> – The receipt is a corrective receipt.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | cmn:OriginalDeliveryNumber | 0...1<br>0/*  | String  | Original delivery number. Records the original delivery number that is replaced when a receipt is voided and corrections are made to that receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  | cmn:EntryPort              | 0...1<br>0/*  | String  | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  | cmn:ExitPort               | 0...1<br>0/*  | String  | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>true



| Data Element |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|-----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | cmn:TransactionIdentifier   | 1...*<br>1/*  | String | <b>Required.</b> Identifier associated with the received serial numbers, for regulatory reporting purposes. <sup>1</sup><br>At least one transaction id is mandatory.                                                                                                                                                                                                                                                                                                         |
|              |  |  | @type                       | 1...1<br>1/*  | String | <b>Required.</b> The transaction identifier type using supported enumeration values (e.g. <a href="#">ASN</a> , <a href="#">PO</a> , <a href="#">RETURN</a> ). <sup>2</sup><br>See the <a href="#">TransactionId</a> enumeration list for valid values.                                                                                                                                                                                                                       |
|              |  |  | @date                       | 0...1<br>0/*  | Date   | <b>Required.</b> The transaction identifier date. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | cmn:TransactionDate         | 1...1<br>1/*  | Date   | <b>Required.</b> The date of the message in YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | cmn:TransactionTime         | 0...1<br>0/*  | Time   | The time of the message in HH:MM:SS format. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  | cmn:ShipToCountryCode       | 1...1<br>2/2  | String | <b>Required.</b> ISO country code for ship to country. Provides application with the information it needs to trigger regulatory reporting in response to relevant events. <sup>6</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                                                                                                                                           |
|              |  |  | cmn:ShipFromCountryCode     | 0...1<br>2/2  | String | <b>Conditionally required</b> if the product is being exported from country (e.g. when <b>ReceiptDistributionType</b> = <a href="#">EXPORTSALE</a> , <a href="#">EXPORTTRANSFER</a> , or <a href="#">EXPORTRETURN</a> ). ISO country code for ship from country. Provides application with the information it needs to trigger regulatory reporting in response to relevant events. <sup>7</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  | cmn:ReceiptDistributionType | 1...1<br>1/*  | String | <b>Required.</b> Advises the application of sale (change of ownership of the product) and transfer (no change of ownership of product, but physical movement of product) for application and regulatory reporting purposes. The actual triggering of regulatory reporting is governed by the configuration in TraceLink. <sup>8</sup><br><a href="#">INCOUNTRYTRANSFER</a> and <a href="#">EXPORTTRANSFER</a> include:                                                        |

<sup>1</sup>P0303005<sup>2</sup>PO<sup>3</sup>2019-03-30<sup>4</sup>2017-05-30<sup>5</sup>02:23:55<sup>6</sup>US<sup>7</sup>US<sup>8</sup>INCOUNTRYSALE

| Data Element |  |  |                             | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|-----------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |               |         | <ul style="list-style-type: none"> <li>Intra-company warehouse transfer of goods.</li> <li>Transfers between Manufacturer (Brand Owner) and 3PL.</li> <li>Transfers between Manufacturer (Brand Owner) and CMO/CPO.</li> <li>Transfers between CMO/CPO and 3PL of Manufacturer (Brand Owner).</li> </ul> <div>  Setting this value alone does not trigger regulatory reporting.         </div> <p>See the <a href="#">ReceiptDistributionType</a> enumeration list for valid values.</p> |
|              |  |  | cmn:TransferWithoutShipment | 0...1<br>0/*  | Boolean | <p>Indicates that the serial numbers are already in an <b>Available</b> state because there is no associated shipment event. Valid values:</p> <ul style="list-style-type: none"> <li><b>true</b> – Serial numbers are in the <b>Available</b> state.</li> <li><b>false</b> – (default) Serial numbers are in the <b>Pending Receipt</b> state.</li> </ul> <p>Only use when <b>tl:receiptDistributionType</b> = <b>INCOUNTRYTRANSFER</b> or <b>IMPORTTRANSFER</b>.</p>                                                                                                      |
|              |  |  | cmn:SupplyType              | 0...1<br>0/*  | String  | <p><b>Conditionally required</b> if <b>cmn:ShipFromCountryCode</b> = <b>KR</b> and <b>cmn:ReceiptDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b>; All values except for Collection apply.:<br/>Identifies the type of supply that is being performed using a valid value from the enumerations list.</p> <p>See the <a href="#">SupplyType</a> enumeration list for valid values.</p>                                                                                                                                                                       |
|              |  |  | cmn:ContractType            | 0...1<br>0/*  | String  | <p><b>Conditionally required</b> if <b>cmn:ShipFromCountryCode</b> = <b>KR</b> and <b>cmn:ReceiptDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b>. Identifies the type of contract for the sale of goods using a valid value from the enumerations list.</p> <p>See the <a href="#">ContractType</a> enumeration list for valid values.</p>                                                                                                                                                                                                                  |
|              |  |  | cmn:Comments                | 0...1<br>0/*  | String  | Optional remarks or comments regarding with delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | cmn:ContractNumber          | 0...1<br>0/*  | String  | Identification number of the contract. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | cmn:FundingSource           | 0...1         | String  | <b>Required.</b> Source of the funding. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>1234567<sup>2</sup>FederalBudgetFunds

| Data Element |  |  |  |                                 |  | Occurs Length  | Type    | Description                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|---------------------------------|--|----------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                                 |  |                |         | See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                                                                                                             |
|              |  |  |  | cmn:DeliveryInspection          |  | 0...1<br>0/*   | String  | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                                                  |
|              |  |  |  | cmn:DeliveryInspectionDate      |  | 0...1<br>10/10 | Date    | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                   |
|              |  |  |  | cmn:DeliveryInspectionNote      |  | 0...1<br>0/*   | String  | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                                                  |
|              |  |  |  | cmn:RemovalFromCirculation      |  | 0...1<br>0/*   | String  | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                                            |
|              |  |  |  | cmn:AggregationInspection       |  | 0...1<br>0/*   | String  | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                                             |
|              |  |  |  | cmn:OrderItemList               |  | 1...1<br>-     | -       | <b>Conditionally required.</b> Order item list group is populated to communicate the expected receive quantities for each item code at the EACH (unit) level. This information verifies the actual serial number received, the correct product, the correct lot number (if provided), and the correct each quantity. |
|              |  |  |  | cmn:AllowShortVerificationCount |  | 0...1<br>0/*   | Boolean | When set to <b>true</b> , allows the count to come up short without an error. If set to <b>false</b> , an error is thrown if the count does not match what is expected. <sup>2</sup>                                                                                                                                 |
|              |  |  |  | cmn:OrderItem                   |  | 1...*<br>-     | -       | <b>Required.</b> A repeating element that captures the item code, lot number, and quantity for each item that will be received for the order. Each unique item code and lot number are communicated in a separate order item group.                                                                                  |
|              |  |  |  | cmn:OrderItemNumber             |  | 0...1<br>0/*   | String  | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                                        |
|              |  |  |  | choice1%                        |  | 1...1<br>-     | Choice  | <b>Required.</b> Populate only one of <b>cmn:InternalMaterialCode</b> , <b>cmn:PackagingItemCode</b> , or <b>cmn:CountryDrugCode</b> . One of the three options must be present.                                                                                                                                     |
|              |  |  |  | cmn:InternalMaterialCode        |  | 0...1<br>1/*   | String  | <b>Conditionally required</b> if neither <b>cmn:PackagingItemCode</b> nor <b>cmn:CountryDrugCode</b> is present. Option 1 for OrderItem I <b>choice1%</b> . Use to identify the product using the internal                                                                                                           |

<sup>1</sup>2021-12-21<sup>2</sup>true

| Data Element |  |  |  |  |                       | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|--|-----------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                       |               |         | 1                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:PackagingItemCode | 0...1<br>1/*  | String  | <b>Conditionally required</b> if neither <b>cmn:InternalMaterialCode</b> nor <b>cmn:CountryDrugCode</b> is present. Option 2 for <b>OrderItem</b>   <b>choice1%</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>2</sup> |
|              |  |  |  |  | @type                 | 1...1<br>1/*  | String  | <b>Required.</b> The product code type for the packaging item code using the supported enumeration values (e.g. GTIN-14). <sup>3</sup><br>See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                        |
|              |  |  |  |  | cmn:CountryDrugCode   | 0...1<br>1/*  | String  | <b>Conditionally required</b> if neither <b>cmn:InternalMaterialCode</b> nor <b>cmn:PackagingItemCode</b> is present. Option 3 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the country drug code configured in Product Master Data. <sup>4</sup>                     |
|              |  |  |  |  | @type                 | 0...1<br>0/*  | String  | The national drug code type using the supported enumeration values. <sup>5</sup><br>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                       |
|              |  |  |  |  | cmn:LotNumber         | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>cmn:ShipFromCountryCode</b> = <b>KR</b> and <b>cmn:IsSerialized</b> = <b>false</b> . The lot or batch code for the items to be received (if available) in an alphanumeric String. <sup>6</sup>                                                                   |
|              |  |  |  |  | cmn:ExpirationDate    | 0...1<br>0/*  | Date    | Expiration date for product in YYYY-MM-DD format. <sup>7</sup>                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:Quantity          | 1...1<br>1/*  | Integer | <b>Conditionally required</b> if <b>cmn:ShipFromCountryCode</b> = <b>KR</b> and <b>cmn:IsSerialized</b> = <b>false</b> . The quantity of items at the EACH (unit) level of the item code and lot if specified to be received. <sup>8</sup>                                                           |
|              |  |  |  |  | cmn:UnitPrice         | 0...1<br>1/*  | Decimal | <b>Required.</b> The unit price of an item. <sup>9</sup>                                                                                                                                                                                                                                             |
|              |  |  |  |  | @currencyCode         | 1...1         | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>10</sup>                                                                                                                                                                                                                         |

<sup>1</sup>100253<sup>2</sup>00882026030229<sup>3</sup>GTIN-14<sup>4</sup>0069-4220-66<sup>5</sup>US\_NDC442<sup>6</sup>A12345<sup>7</sup>2018-08-15<sup>8</sup>480<sup>9</sup>50.43<sup>10</sup>USD

| Data Element |  |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|---------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:VAT                   | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>1</sup>                                                                                                                                                                                                                                    |
|              |  |  |  |  | @currencyCode             | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>2</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                     |
|              |  |  |  |  | cmn:GrossPrice            | 0...1<br>-    | Decimal | Gross price including unit price and all taxes and fees. <sup>3</sup>                                                                                                                                                                                                     |
|              |  |  |  |  | @currencyCode             | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>4</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                                                                     |
|              |  |  |  |  | cmn:IsSerialized          | 0...1<br>0/*  | Boolean | <b>Conditionally required.</b> Indicates if the item is not serialized. <sup>5</sup><br><br> If omitted, and <b>cmn:OrderItem</b> exists, defaults value to <b>true</b> .              |
|              |  |  |  |  | cmn:TransactionIdentifier | 0...*<br>0/*  | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>6</sup>                                                                                                                                              |
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b><br>The transaction identifier type. Valid values:<br><ul style="list-style-type: none"> <li>• <b>DESTRUCTION</b></li> <li>• <b>INVOICE</b></li> <li>• <b>NOTAFISCAL</b></li> <li>• <b>OTHER</b></li> <li>• <b>PO</b></li> <li>• <b>RETURN</b></li> </ul> |

<sup>1</sup>152.22<sup>2</sup>USD<sup>3</sup>152.22<sup>4</sup>USD<sup>5</sup>false<sup>6</sup>PO303005

| Data Element |  |  |                |                               |                |       | Occurs Length | Type         | Description                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|----------------|-------------------------------|----------------|-------|---------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                |                               |                | @date | 0...1<br>0/*  | Date         | <b>Required.</b> The transaction identifier date. <sup>1</sup>                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | cmn:SenderInfo |                               |                |       | 1...1<br>-    | -            | <b>Required.</b> Information about the supply chain partner that is sending the shipment. Contains XML choice elements of <b>FromBusinessParty</b> and <b>ShipFromLocation</b> that govern whether to use master data lookup to populate the address, license, and contact elements. Only one option in <b>choice1%</b> may be populated. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                | choice1%                      |                |       |               | 1...1<br>-   | Choice                                                                                                                                                                                                                                                                                                                                    | <b>Required.</b> One of the following options: <ul style="list-style-type: none"><li>Option 1: Contains only <b>cmn:FromBusinessPartyLookupId</b>.<ul style="list-style-type: none"><li>Populate this element only if master data lookup is desired.</li></ul></li><li>Option 2: Contains full <b>cmn:FromBusinessPartyInfo</b> business address the customer populates directly in the interface.<ul style="list-style-type: none"><li>Populate this element fully only if master data lookup is not desired.</li></ul></li></ul> |
|              |  |  |                | cmn:FromBusinessPartyLookupId |                |       |               | 0...1<br>1/* | String                                                                                                                                                                                                                                                                                                                                    | <b>Conditionally required</b> if full business address is provided in <b>cmn:FromBusinessPartyInfo</b> option. Option 1 for senderInfo   <b>choice1%</b> group. <sup>2</sup><br>A lookup identifier associated with the sold-from business entity. This value is used as the lookup key in master data to populate the details in <b>cmn:FromBusinessPartyInfo</b> .                                                                                                                                                               |
|              |  |  |                |                               | @type          |       |               | 1...1<br>1/* | String                                                                                                                                                                                                                                                                                                                                    | <b>Conditionally required</b> if full business address is not provided in <b>cmn:FromBusinessPartyInfo</b> option. The type of the sold from business entity identifier from the provided enumeration list. <sup>3</sup><br>See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                            |
|              |  |  |                | cmn:FromBusinessPartyInfo     |                |       |               | 0...1<br>-   | -                                                                                                                                                                                                                                                                                                                                         | <b>Conditionally required</b> if <b>cmn:FromBusinessPartyLookupId</b> to leverage master data lookup is not populated. Option 2 for <b>senderInfo choice1%</b> group.<br>The full business information associated with the sold from business entity is provided.                                                                                                                                                                                                                                                                  |
|              |  |  |                |                               | cmn:BusinessId |       |               | 1...*<br>1/* | String                                                                                                                                                                                                                                                                                                                                    | <b>Required.</b> The identifier associated with the sold from business entity. Mandatory for regulatory reporting. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                |                               |                | @type | 1...1<br>1/*  | String       | <b>Required.</b> The type of the <b>BusinessId</b> identifier. <sup>5</sup>                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>2019-03-30<sup>2</sup>115740<sup>3</sup>COMPANYID<sup>4</sup>8888882028677<sup>5</sup>GLN

| Data Element |  |  |  |  |                            |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|----------------------------|--|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                            |  |               |        | <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  |  |  |  | cmn:BusinessClassification |  | 0...1<br>0/*  | String | Business classification. <sup>1</sup><br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:BusinessInfo           |  | 0...1<br>-    | -      | The business name and address of the sold from business entity.                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | cmn:BusinessName           |  | 1...1<br>0/*  | String | <b>Required.</b> The business name of the trading partner. <sup>2</sup>                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:Street1                |  | 1...1<br>0/*  | String | <b>Required.</b> The first line of the street address. <sup>3</sup>                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | cmn:Street2                |  | 0...1<br>0/*  | String | The second line of the street address. <sup>4</sup>                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | cmn:City                   |  | 1...1<br>1/*  | String | <b>Required.</b> The city. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:Village                |  | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | cmn:HouseNumber            |  | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                                                                                                                                      |
|              |  |  |  |  | cmn:Township               |  | 0...1         | String | Name of the township in which the company is located.                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>MANUFACTURER<sup>2</sup>Kendall Pharma<sup>3</sup>300 Trade Center<sup>4</sup>Suite 7690<sup>5</sup>Woburn

| Data Element |  |  |  |          |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|--|----------|--|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |  | 0...1<br>0/*  | String | District Code. <sup>1</sup><br><br><div>  Must be a 3-digit numeric code. </div>                                                                                                       |
|              |  |  |  |          |  | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>2</sup>                                                                                                            |
|              |  |  |  |          |  | 1...1<br>0/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>3</sup>                                                                                                                                                                                                               |
|              |  |  |  |          |  | 0...1<br>0/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>4</sup>                                                                                                                                    |
|              |  |  |  |          |  | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                       |
|              |  |  |  |          |  | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div>       |
|              |  |  |  |          |  | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div> |
|              |  |  |  |          |  | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                    |
|              |  |  |  |          |  | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                     |
|              |  |  |  | choice2% |  | 0...1         | Choice | Optional choice element (no error if neither are present):                                                                                                                                                                                                                |

<sup>1</sup>035<sup>2</sup>MA<sup>3</sup>01801<sup>4</sup>US



| Data Element |  |  |  |                              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|------------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                              |               |        | <ul style="list-style-type: none"> <li>Option 1: Contains only the <b>cmn:ShipFromLocationLookupId</b>. <ul style="list-style-type: none"> <li>Populate this element only if master data lookup is desired.</li> </ul> </li> <li>Option 2: Contains full <b>cmn:ShipFromLocationInfo</b> business address fielded data that will be populated by the customer directly in the interface. <ul style="list-style-type: none"> <li>Populate this element fully only if master data lookup is not desired.</li> </ul> </li> </ul> |
|              |  |  |  | cmn:ShipFromLocationLookupId | 0...1<br>1/*  | String | <b>Required.</b> Option 1 for senderInfo   <b>choice2%</b> group. <sup>1</sup><br>A lookup identifier associated with the ship from location. Use this value as the lookup key in master data to populate the details in <b>cmn:ShipFromLocationInfo</b> .                                                                                                                                                                                                                                                                    |
|              |  |  |  | @type                        | 1...1<br>1/*  | String | <b>Conditionally required</b> if full business address is not provided in <b>cmn:ShipFromLocationInfo</b> option. The type of the ship from location identifier using the enumeration list. <sup>2</sup><br>See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                       |
|              |  |  |  | cmn:ShipFromLocationInfo     | 0...1<br>-    | -      | <b>Required.</b> Option 2 for senderInfo   <b>choice2%</b> group.<br>The full business information associated with the ship from location is provided directly.                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | cmn:FacilityId               | 0...*<br>0/*  | String | <b>Required.</b> The ship from location identifier. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | @type                        | 1...1<br>1/*  | String | <b>Required.</b> The type of the <b>cmn:FacilityId</b> identifier. <sup>4</sup> <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                        |
|              |  |  |  | cmn:LocationInfo             | 0...1<br>-    | -      | <b>Conditionally required</b> for US. The business name and address of the ship from location.                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>1056231<sup>2</sup>COMPANYSITEID<sup>3</sup>8888882028655<sup>4</sup>GLN

| Data Element |  |  |  |  |                   | Occurs Length | Type   | Description                                                                                                                                                                                                                              |
|--------------|--|--|--|--|-------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:BusinessName  | 1...1<br>0/*  | String | <b>Required.</b> The business name of the trading partner. <sup>1</sup>                                                                                                                                                                  |
|              |  |  |  |  | cmn:Street1       | 1...1<br>0/*  | String | <b>Required.</b> The first line of the street address. <sup>2</sup>                                                                                                                                                                      |
|              |  |  |  |  | cmn:Street2       | 0...1<br>0/*  | String | The second line of the street address.                                                                                                                                                                                                   |
|              |  |  |  |  | cmn:City          | 1...1<br>0/*  | String | <b>Required.</b> The city. <sup>3</sup>                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Village       | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber   | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> . |
|              |  |  |  |  | cmn:Township      | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District      | 0...1<br>0/*  | String | <b>Conditionally required</b> for India. District Code. <sup>4</sup><br><br> Must be a 3-digit numeric code.                                          |
|              |  |  |  |  | cmn:StateOrRegion | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>5</sup>                                                                           |
|              |  |  |  |  | cmn:PostalCode    | 1...1<br>0/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>6</sup>                                                                                                                                                                              |
|              |  |  |  |  | cmn:Country       | 0...1         | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1                                                                                                                                          |

<sup>1</sup>Rx Logistics<sup>2</sup>1 Distribution Drive<sup>3</sup>Memphis<sup>4</sup>035<sup>5</sup>TN<sup>6</sup>13184

| Data Element |  |  |  |  |                   |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|-------------------|-------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                   |                         |               |        | 1                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |                   | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                       |
|              |  |  |  |  |                   | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div>       |
|              |  |  |  |  |                   | cmn:HouseGUID           | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div> |
|              |  |  |  |  |                   | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                    |
|              |  |  |  |  |                   | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                     |
|              |  |  |  |  | cmn:LicenseNumber |                         | 0...*<br>0/*  | String | The license number of the facility. This element may be repeated to include as many license numbers as mandatory (e.g. state and federal license). <sup>2</sup>                                                                                                           |
|              |  |  |  |  |                   | @state                  | 0...1<br>0/*  | String | <b>Required.</b> The state or region in which the trading partner is licensed, using the standard two letter abbreviation specified in ISO 3166-2:1998 country sub-division code. Used to give additional context to the license number. <sup>3</sup>                     |
|              |  |  |  |  |                   | @agency                 | 0...1<br>0/*  | String | <b>Required.</b> The agency that granted the license (e.g. Florida DOH, NABP). Used to give additional context to the license number. <sup>4</sup>                                                                                                                        |
|              |  |  |  |  | cmn:ContactInfo   |                         | 0...1<br>-    | -      | Contact information for use by downstream trading partners to authenticate (e.g. verify) the message information recorded on the pedigree with the sender party.                                                                                                          |
|              |  |  |  |  |                   | cmn:Name                | 0...1         | String | <b>Required.</b> The name of the contact department or individual at the company. <sup>5</sup>                                                                                                                                                                            |

<sup>1</sup>US<sup>2</sup>8888800003604<sup>3</sup>TN<sup>4</sup>BOP<sup>5</sup>Customer Service

| Data Element |  |  |                  |                             |               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|------------------|-----------------------------|---------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                  |                             |               |               |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |                  |                             | cmn:Title     | 0...1<br>0/*  | String | The title of the individual if a person was provided in <b>cmn:Name</b> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |                  |                             | cmn:Telephone | 1...1<br>1/*  | String | <b>Required.</b> The phone number of the contact department or individual at the company. Must begin with the + character followed by the Country Calling Code. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |                  |                             | cmn:Email     | 0...1<br>0/*  | String | The email address of the contact department or individual at the company. Should be included if available. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |                  |                             | cmn:Url       | 0...1<br>0/*  | String | The Web address to facilitate authentication. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  | cmn:ReceiverInfo |                             |               | 1...1<br>-    | -      | <b>Required.</b> Information about the supply chain partner that is receiving the shipment. <b>cmn:ReceiverInfo</b> contains XML choice elements for <b>ToBusinessParty</b> and <b>ShipToLocation</b> that govern whether to use master data lookup to populate the address, license, and contact elements. Only one option in <b>choice1%</b> may be populated.                                                                                                                                                                                                                         |
|              |  |  |                  | choice1%                    |               | 1...1<br>-    | Choice | <b>Required.</b> Required choice element. One option must be selected, but not both. <ul style="list-style-type: none"><li>Option 1: Contains only the <b>cmn:ToBusinessPartyLookupId</b>.<ul style="list-style-type: none"><li>Populate this element only if master data lookup is desired.</li></ul></li><li>Option 2: Contains full <b>cmn:ToBusinessPartyInfo</b> business address fielded data populated by the customer directly in the interface.<ul style="list-style-type: none"><li>Populate this element fully only if master data lookup is not desired.</li></ul></li></ul> |
|              |  |  |                  | cmn:ToBusinessPartyLookupId |               | 0...1<br>0/*  | String | <b>Required.</b> Option 1 for ReceiverInfo   <b>choice1%</b> group. <sup>5</sup> A lookup identifier associated with the sold to business entity. Use this value as the lookup key in master data to populate the details in <b>cmn: ToBusinessPartyInfo</b> .                                                                                                                                                                                                                                                                                                                           |
|              |  |  |                  |                             | @type         | 1...1<br>1/*  | String | <b>Conditionally required</b> if full business address not provided in <b>cmn:ToBusinessPartyInfo</b> option. The type of the sold to business entity identifier from the provided enumeration list. <sup>6</sup> See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                            |

<sup>1</sup>Customer Service<sup>2</sup>+1-781-555-5624<sup>3</sup>support@kendallpharma.com<sup>4</sup><https://www.kendallpharma.com/authenticate><sup>5</sup>13655<sup>6</sup>COMPANYID

| Data Element |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|----------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | cmn:ToBusinessPartyInfo    | 0...1<br>-    | -      | <b>Required.</b> Option 2 for ReceiverInfo   <b>choice1%</b> group.<br>The full business information associated with the sold to business entity is provided.                                                                                                                                                                                                                                                                                             |
|              |  |  |  | cmn:BusinessId             | 1...*<br>1/*  | String | <b>Required.</b> The return to business entity identifier. Mandatory for regulatory reporting. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | @type                      | 1...1<br>1/*  | String | <b>Required.</b> The type of the <b>cmn:BusinessId</b> identifier. <sup>2</sup><br><div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |
|              |  |  |  | cmn:BusinessClassification | 0...1<br>0/*  | String | Business classification. <sup>3</sup><br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | cmn:BusinessInfo           | 0...1<br>-    | -      | The sold to business entity business name and address.                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | cmn:BusinessName           | 1...1<br>0/*  | String | <b>Required.</b> The business name of the trading partner. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | cmn:Street1                | 1...1<br>0/*  | String | <b>Required.</b> The first line of the street address. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | cmn:Street2                | 0...1<br>0/*  | String | The second line of the street address.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | cmn:City                   | 1...1<br>0/*  | String | <b>Required.</b> The city. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>3333331013655<sup>2</sup>GLN<sup>3</sup>DISTRIBUTOR<sup>4</sup>Wholesale Inc<sup>5</sup>555 Neelan Road<sup>6</sup>Sacramento

| Data Element |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|-----------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:Village           | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber       | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                 |
|              |  |  |  |  | cmn:Township          | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District          | 0...1<br>0/*  | String | District Code. <sup>1</sup><br><br> Must be a 3-digit numeric code.                                                                                                   |
|              |  |  |  |  | cmn:StateOrRegion     | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>2</sup>                                                                                           |
|              |  |  |  |  | cmn:PostalCode        | 1...1<br>0/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>3</sup>                                                                                                                                                                                              |
|              |  |  |  |  | cmn:Country           | 0...1<br>0/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>4</sup>                                                                                                                  |
|              |  |  |  |  | cmn:CorporateFax      | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                      |
|              |  |  |  |  | cmn:AddressObjectGUID | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |  | cmn:HouseGUID         | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).                                                                                                                                                        |

<sup>1</sup>035<sup>2</sup>CA<sup>3</sup>M95833<sup>4</sup>US

| Data Element |  |  |  |          |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|----------|----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |                            |               |        |  Maximum of 36 characters, using the digits 0-9 and letters A-F.                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |          | cmn:TaxRegistrationCode    | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |          | cmn:PremisesCode           | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | choice2% |                            | 0...1<br>-    | Choice | Optional choice element: <ul style="list-style-type: none"> <li>Option 1: Contains only the <b>cmn:ShipToLocationLookupId</b>.               <ul style="list-style-type: none"> <li>Populate this element only if master data lookup is desired.</li> </ul> </li> <li>Option 2: Contains full <b>cmn:ShipToLocationInfo</b> business address fielded data populated by the customer directly in the interface.               <ul style="list-style-type: none"> <li>Populate this element fully only if master data lookup is not desired.</li> </ul> </li> </ul> |
|              |  |  |  |          | cmn:ShipToLocationLookupId | 0...1<br>1/*  | String | <b>Required.</b> Option 1 for ReceiverInfo   <b>choice2%</b> group. <sup>1</sup><br>A lookup identifier associated with the ship to location using the enumeration list. Use this value as the lookup key in master data to populate the details in <b>cmn:ShipToLocationInfo</b> .                                                                                                                                                                                                                                                                               |
|              |  |  |  | @type    |                            | 1...1<br>1/*  | String | <b>Required.</b> The type of the ship to location identifier. <sup>2</sup><br>See the <a href="#">LocationLookupId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |          | cmn:ShipToLocationInfo     | 0...1<br>-    | -      | <b>Conditionally required</b> for US. Option 2 for ReceiverInfo   <b>choice2%</b> group.<br>The full business information associated with the ship to location is provided directly.                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |          | cmn:FacilityId             | 0...*<br>0/*  | String | <b>Required.</b> Populated with the ship from location identifier. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |          | @type                      | 1...1<br>1/*  | String | <b>Required.</b> The type of the <b>cmn:FacilityId</b> identifier. <sup>4</sup><br> Only one of the following values may be used per message:                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>1056231<sup>2</sup>COMPANYSITEID<sup>3</sup>3333331013655<sup>4</sup>GLN

| Data Element |  |  |  |  |                  |  | Occurs Length | Type   | Description                                                                                                                                                                                                                              |
|--------------|--|--|--|--|------------------|--|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                  |  |               |        | <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                       |
|              |  |  |  |  | cmn:LocationInfo |  | 0...1<br>-    | -      | Populated with the business name and address of the ship to location.                                                                                                                                                                    |
|              |  |  |  |  | cmn:BusinessName |  | 1...1<br>0/*  | String | <b>Required.</b> The business name of the trading partner. <sup>1</sup>                                                                                                                                                                  |
|              |  |  |  |  | cmn:Street1      |  | 1...1<br>0/*  | String | <b>Required.</b> The first line of the street address. <sup>2</sup>                                                                                                                                                                      |
|              |  |  |  |  | cmn:Street2      |  | 0...1<br>0/*  | String | The second line of the street address.                                                                                                                                                                                                   |
|              |  |  |  |  | cmn:City         |  | 1...1<br>0/*  | String | <b>Required.</b> The city. <sup>3</sup>                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Village      |  | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                     |
|              |  |  |  |  | cmn:HouseNumber  |  | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> . |
|              |  |  |  |  | cmn:Township     |  | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                    |
|              |  |  |  |  | cmn:District     |  | 0...1<br>0/*  | String | District Code. <sup>4</sup> <div> <i>i</i> Must be a 3-digit numeric code.         </div>                                                                                                                                                |

<sup>1</sup>Wholesale Inc<sup>2</sup>555 Neelan Road<sup>3</sup>Sacramento<sup>4</sup>035



| Data Element |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|-------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:StateOrRegion       | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>1</sup>                                                                                                            |
|              |  |  |  |  | cmn:PostalCode          | 1...1<br>0/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>2</sup>                                                                                                                                                                                                               |
|              |  |  |  |  | cmn:Country             | 0...1<br>0/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>3</sup>                                                                                                                                   |
|              |  |  |  |  | cmn:CorporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                       |
|              |  |  |  |  | cmn:AddressObjectGUID   | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div>       |
|              |  |  |  |  | cmn:HouseGUID           | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).<br><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F. </div> |
|              |  |  |  |  | cmn:TaxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                    |
|              |  |  |  |  | cmn:PremisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                     |
|              |  |  |  |  | cmn:LicenseNumber       | 0...*<br>0/*  | String | Populated with the license number of the facility. This element may be repeated to include as many license numbers as required (e.g. state and federal license). <sup>4</sup>                                                                                             |
|              |  |  |  |  | @state                  | 0...1<br>0/*  | String | <b>Required.</b> The state or region in which the trading partner is licensed, using the standard two letter abbreviation specified in ISO 3166-2:1998 country sub-division code. Used to give additional context to the license number. <sup>5</sup>                     |

<sup>1</sup>CA<sup>2</sup>95833<sup>3</sup>US<sup>4</sup>3333300008701<sup>5</sup>CA

| Data Element |  |  |                 |                                  |                |         | Occurs Length | Type         | Description                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|-----------------|----------------------------------|----------------|---------|---------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                 |                                  |                | @agency | 0...1<br>0/*  | String       | <b>Required.</b> The agency that granted the license (e.g. Florida DOH, NABP). Used to give additional context to the license number. <sup>1</sup>                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  | cmn:CarrierInfo |                                  |                |         | 0...*<br>-    | -            | <b>Conditionally required</b> if <b>ShipToCountryCode</b> = <b>BR</b> . Information about the transportation partner that is transporting the shipment. <b>cmn:CarrierInfo</b> contains XML choice elements that govern whether master data lookup will be used to populate the address elements. Only one option in <b>choice1%</b> may be populated. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                 | choice1%                         |                |         |               | 1...1<br>-   | Choice                                                                                                                                                                                                                                                                                                                                                 | Optional choice element: No error if neither are present. <ul style="list-style-type: none"><li>Option 1: Contains only the <b>cmn:CarrierBusinessPartyLookupId</b>.<ul style="list-style-type: none"><li>Populate this element <b>ONLY</b> if master data lookup is desired.</li></ul></li><li>Option 2: Contains full <b>cmn:CarrierBusinessPartyInfo</b> business address fielded data that will be populated by the customer directly in the interface.<ul style="list-style-type: none"><li>Populate this element fully <b>ONLY</b> if master data lookup is not desired.</li></ul></li></ul> |
|              |  |  |                 | cmn:CarrierBusinessPartyLookupId |                |         |               | 0...1<br>1/* | String                                                                                                                                                                                                                                                                                                                                                 | <b>Conditionally required</b> if full business address not provided in <b>cmn:CarrierBusinessPartyInfo</b> option. Option 1 for CarrierInfo   <b>choice1%</b> group. <sup>2</sup> A lookup identifier associated with the Carrier entity from the enumeration list. This value is used as the lookup key in master data to populate the details in <b>CarrierBusinessPartyInfo</b> .                                                                                                                                                                                                               |
|              |  |  |                 |                                  | @type          |         | 1...1<br>1/*  | String       | <b>Conditionally required</b> if full business address not provided in <b>cmn:CarrierBusinessPartyInfo</b> option. The type of the carrier business entity identifier from the provided enumeration list. <sup>3</sup> See the <a href="#">BusinessLookupId</a> enumeration list for valid values.                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                 | cmn:CarrierBusinessPartyInfo     |                |         |               | 0...1<br>-   | -                                                                                                                                                                                                                                                                                                                                                      | <b>Conditionally required</b> if <b>cmn:CarrierBusinessPartyLookupId</b> to leverage master data lookup is not populated. Option 2 for CarrierInfo   <b>choice1%</b> group. The full business information associated with the transportation carrier business entity is provided.                                                                                                                                                                                                                                                                                                                  |
|              |  |  |                 |                                  | cmn:BusinessId |         | 1...*<br>1/*  | String       | <b>Required.</b> The identifier associated with the transport carrier business entity. This value is mandatory for regulatory reporting. <sup>4</sup>                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |                 |                                  |                | @type   | 1...1         | String       | <b>Required.</b> The type of the <b>cmn:BusinessId</b> identifier. <sup>5</sup>                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>BOP<sup>2</sup>00.000.000/0001-00<sup>3</sup>BR\_CNPJ<sup>4</sup>00.000.000/0001-00<sup>5</sup>BR\_CNPJ

| Data Element |  |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|--|----------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                            |               |        | <p>❗ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  |  |  |  | cmn:BusinessClassification | 0...1<br>0/*  | String | N/A. <sup>1</sup>                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | cmn:BusinessInfo           | 0...1<br>-    | -      | Populated with the business name and address of the transportation carrier business entity.                                                                                                                                                                                           |
|              |  |  |  |  | cmn:BusinessName           | 1...1<br>0/*  | String | <b>Required.</b> The business name of the trading partner. <sup>2</sup>                                                                                                                                                                                                               |
|              |  |  |  |  | cmn:Street1                | 1...1<br>0/*  | String | <b>Required.</b> The first line of the street address. <sup>3</sup>                                                                                                                                                                                                                   |
|              |  |  |  |  | cmn:Street2                | 0...1<br>0/*  | String | The second line of the street address.                                                                                                                                                                                                                                                |
|              |  |  |  |  | cmn:City                   | 1...1<br>0/*  | String | <b>Required.</b> The city. <sup>4</sup>                                                                                                                                                                                                                                               |
|              |  |  |  |  | cmn:Village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:HouseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>Street1</b> .                                              |
|              |  |  |  |  | cmn:Township               | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                 |

<sup>1</sup>DISTRIBUTOR<sup>2</sup>Wholesale Inc<sup>3</sup>555 Neelan Road<sup>4</sup>Sacramento

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|---------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | cmn:District              | 0...1<br>0/*  | String | District Code. <sup>1</sup><br><br> Must be a 3-digit numeric code.                                                                                                       |
|              |  |  |  |  | cmn:StateOrRegion         | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>2</sup>                                                                                               |
|              |  |  |  |  | cmn:PostalCode            | 1...1<br>0/*  | String | <b>Required.</b> The ZIP or other postal code. <sup>3</sup>                                                                                                                                                                                                  |
|              |  |  |  |  | cmn:Country               | 0...1<br>0/*  | String | <b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>4</sup>                                                                                                                      |
|              |  |  |  |  | cmn:CorporateFax          | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                          |
|              |  |  |  |  | cmn:AddressObjectGUID     | 0...1<br>0/*  | String | The global identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F.       |
|              |  |  |  |  | cmn:HouseGUID             | 0...1<br>0/*  | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS).<br><br> Maximum of 36 characters, using the digits 0-9 and letters A-F. |
|              |  |  |  |  | cmn:TaxRegistrationCode   | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                       |
|              |  |  |  |  | cmn:PremisesCode          | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                        |
|              |  |  |  |  | cmn:WarehouseOperatorName | 0...1         | String | Name of the person responsible for warehouse operations. This element can be                                                                                                                                                                                 |

<sup>1</sup>035<sup>2</sup>CA<sup>3</sup>95833<sup>4</sup>US

| Data Element |  |                      |                   | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|--|----------------------|-------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                      |                   |               |          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  | som:AddReceivedItems |                   | 0...1<br>-    | -        | <b>Required.</b> List of serial numbers for the outermost handling units received for this delivery. TraceLink looks up the child aggregations of the serial numbers provided in the list and updates the container and all child items with the received and subsequent shipped status. This element is mandatory before the delivery complete flag can be set, though it can be communicated at any time (e.g. with, before, or after the order details have been communicated).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |                      | cmn:Serial        | 1...*<br>1/*  | String   | <b>Required.</b> Serial number of an outermost handling unit received for this delivery. One serial number is included per received container (or item if shipping loose items). This is typically a pallet or case serial number. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |                      | @format           | 0...1<br>0/*  | C        | <b>Required.</b> Attribute that identifies format of serial numbers. <sup>3</sup> See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |                      | @orderItemNumber  | 0...1<br>0/*  | String   | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  | som:Aggregation      |                   | 0...1<br>-    | -        | <p>Communicates new aggregations created by the warehouse that are included in the shipment. The <b>PickedItems</b> includes the top-level container serial numbers and loose items. If the warehouse creates a new aggregation (e.g. a new pallet or mixed case), the new aggregation hierarchies are communicated in the <b>cmn:Aggregation</b> element group.</p> <p>If an existing case ships, the case must be scanned and the case hierarchy is not provided. If a new mixed case is created, the hierarchy for that new case is communicated.</p> <p>This enables the distribution warehouse to locally manage changes to aggregation hierarchies. The warehouse communicates the new aggregation hierarchies of the shipped goods at the time of shipment without having to send disaggregation and aggregation events. TraceLink implicitly disaggregates and aggregates operations to achieve the end state hierarchy prior to processing the shipment. TraceLink also auto-commissions the SSCC numbers for new cases and pallets when these SSCC numbers are not yet commissioned.</p> |
|              |  |                      | cmn:EventDateTime | 1...1<br>0/*  | Datetime | <b>Required.</b> The date and time of aggregation event with the UTC time zone indicator in YYYY-MM-DDTHH:MM:SS.ssZ format. If not provided, the current GMT date time is used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |                      | cmn:EventLocation | 1...1         | String   | <b>Required.</b> Site-level SGLN of the location where the event occurs. SGLN format is the numeric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>John Smith<sup>2</sup>015088202501033321100000060001<sup>3</sup>AI(01)+AI(21)

| Data Element |  |  |                    |                  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                          |
|--------------|--|--|--------------------|------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                    |                  |               |        | component only, with the urn prefix stripped (e.g. <b>8888882.02867.0</b> instead of <b>urn:epc:id:sgln:8888882.02867.0</b> typically found in EPCIS events).                                                                                                                        |
|              |  |  | cmn:ParentSerial   |                  | 1...1<br>1/*  | String | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI(01)(21) formatted serial number for GTINs or AI(00) formatted serial number for SSCCs. Non-GS1 serial numbers (e.g. China) are expressed in native format. |
|              |  |  |                    | @companyPrefix   | 0...1<br>0/*  | String | The GS1 Company Prefix present in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                   |
|              |  |  |                    | @filterValue     | 0...1<br>0/*  | String | The filter value present in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                         |
|              |  |  |                    | @format          | 0...1<br>0/*  | String | The format of the serial numbers.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                               |
|              |  |  |                    | @packedStatus    | 0...1<br>0/*  | String | The packaging status of the container.<br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                    |
|              |  |  | cmn:PackagingLevel |                  | 0...1<br>0/*  | String | The packaging level of the commissioned items in <b>cmn:NumberList</b> .<br>See the <a href="#">PackagingLevel</a> enumeration list for valid values.                                                                                                                                |
|              |  |  | cmn:NumberList     |                  | 1...1<br>-    | -      | <b>Required.</b> List of serial numbers for the items packed into the container serial number.                                                                                                                                                                                       |
|              |  |  |                    | cmn:Serial       | 1...*<br>1/*  | String | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parenthesis for the AI keys. AI(01)(21) formatted serial number for GTINs or AI(00) formatted serial number for SSCCs. Non-GS1 serial numbers (e.g. China) are expressed in native format. |
|              |  |  |                    | @companyPrefix   | 0...1<br>0/*  | String | The GS1 Company Prefix present in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                   |
|              |  |  |                    | @filterValue     | 0...1<br>0/*  | String | The filter value present in GTIN-14 and SSCC serial numbers.                                                                                                                                                                                                                         |
|              |  |  |                    | @format          | 0...1<br>0/*  | String | The format of the serial numbers.<br>See the <a href="#">Format</a> enumeration list for valid values.                                                                                                                                                                               |
|              |  |  |                    | @packedStatus    | 0...1<br>0/*  | String | The packaging status of the container.<br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                                                                                    |
|              |  |  |                    | @orderItemNumber | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>cmn:OrderItem</b> .                                                                                                                        |

## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMReceiptMessage xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>712333444</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>512333444</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>201907250</cmn:FileControlNumber>
    <cmn:FileDate>2019-07-25</cmn:FileDate>
    <cmn:FileTime>18:09:45Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <!--<cmn:LocationId type="DUNS4">1454852202864</cmn:LocationId>-->
    <cmn:LocationId>312333</cmn:LocationId>
    <cmn:DeliveryNumber>8425257855</cmn:DeliveryNumber>
    <cmn:DeliveryCompleteFlag>false</cmn:DeliveryCompleteFlag>
    <som:OrderDetails>
      <cmn:CorrectiveReceipt>true</cmn:CorrectiveReceipt>
      <cmn:OriginalDeliveryNumber>1234567</cmn:OriginalDeliveryNumber>
      <cmn:EntryPort></cmn:EntryPort>
      <cmn:ExitPort></cmn:ExitPort>
      <cmn:TransactionIdentifier type="PO" date="2019-07-25">PO98</cmn:TransactionIdentifier>
      <cmn:TransactionDate>2019-07-25</cmn:TransactionDate>
      <cmn:ShipToCountryCode>RU</cmn:ShipToCountryCode>
      <cmn:ReceiptDistributionType>IMPORTPURCHASE</cmn:ReceiptDistributionType>
      <cmn:TransferWithoutShipment>false</cmn:TransferWithoutShipment>
      <cmn:SupplyType>MedicalCareDistribution</cmn:SupplyType>
      <cmn:ContractType>PrivateContract</cmn:ContractType>
      <cmn:Comments>Comments</cmn:Comments>
      <cmn:ContractNumber>C107</cmn:ContractNumber>
      <cmn:FundingSource>OwnFunds</cmn:FundingSource>
      <cmn:OrderItemList>
        <cmn:AllowShortVerificationCount>false</cmn:AllowShortVerificationCount>
        <cmn:OrderItem>
          <cmn:OrderItemNumber>908</cmn:OrderItemNumber>
          <cmn:InternalMaterialCode>133661</cmn:InternalMaterialCode>
          <!--<cmn:PackagingItemCode type="NTIN">s17</cmn:PackagingItemCode>-->
          <cmn:LotNumber>L807</cmn:LotNumber>
```

```

    <cmn:ExpirationDate>2029-07-25</cmn:ExpirationDate>
    <cmn:Quantity>10</cmn:Quantity>
    <cmn:UnitPrice currencyCode="RUB">100.00</cmn:UnitPrice>
    <cmn:VAT currencyCode="RUB">50.00</cmn:VAT>
    <cmn:GrossPrice currencyCode="RUB">150.00</cmn:GrossPrice>
    <cmn:IsSerialized>false</cmn:IsSerialized>
    <cmn:TransactionIdentifier type="PO" date="2019-07-25">PO1078</cmn:TransactionIdentifier>
  </cmn:OrderItem>
</cmn:OrderItemList>
<cmn:SenderInfo>
  <!--<cmn:FromBusinessPartyLookupId type="KR_PROVIDER_CODE">s23</cmn:FromBusinessPartyLookupId-->
  <cmn:FromBusinessPartyInfo>
    <cmn:BusinessId type="DUNS">710040977</cmn:BusinessId>
    <cmn:BusinessId type="GLN">8779891013658</cmn:BusinessId>
    <cmn:BusinessClassification>MANUFACTURER</cmn:BusinessClassification>
    <cmn:BusTransactionRole>ShipTo</cmn:BusTransactionRole>
    <cmn:BusinessInfo>
      <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>
      <cmn:Street1>10 Welsh St</cmn:Street1>
      <cmn:City>Malden</cmn:City>
      <cmn:Village></cmn:Village>
      <cmn:HouseNumber></cmn:HouseNumber>
      <cmn:Township></cmn:Township>
      <cmn:StateOrRegion>MA</cmn:StateOrRegion>
      <cmn:PostalCode>02148</cmn:PostalCode>
      <cmn:Country>US</cmn:Country>
      <cmn:CorporateFax></cmn:CorporateFax>
      <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>
      <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
      <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
      <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:BusinessInfo>
  </cmn:FromBusinessPartyInfo>
  <!--<cmn:ShipFromLocationLookupId type="IN_LOCATION_ID">s38</cmn:ShipFromLocationLookupId-->
  <cmn:ShipFromLocationInfo>
    <cmn:FacilityId type="DEA">710040977</cmn:FacilityId>
    <cmn:FacilityId type="SGLN">9997777.01994.0</cmn:FacilityId>
    <cmn:LocationInfo>
      <cmn:BusinessName>Clara Manufacturing</cmn:BusinessName>

```



```

    <cmn:Street1>10 Welsh St</cmn:Street1>
    <cmn:City>Malden</cmn:City>
    <cmn:Village></cmn:Village>
    <cmn:HouseNumber></cmn:HouseNumber>
    <cmn:Township></cmn:Township>
    <cmn:StateOrRegion>MA</cmn:StateOrRegion>
    <cmn:PostalCode>02148</cmn:PostalCode>
    <cmn:Country>US</cmn:Country>
    <cmn:CorporateFax></cmn:CorporateFax>
    <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000152</cmn:AddressObjectGUID>
    <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</cmn:HouseGUID>
    <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
    <cmn:PremisesCode></cmn:PremisesCode>
  </cmn:LocationInfo>
  <cmn:LicenseNumber state="MA" agency="BORP">773BT8</cmn:LicenseNumber>
  <cmn:ContactInfo>
    <cmn:Name>Customer Service</cmn:Name>
    <cmn:Telephone>+1-781-555-5622</cmn:Telephone>
    <cmn:Email>support@claramanufacturing.com</cmn:Email>
  </cmn:ContactInfo>
</cmn:ShipFromLocationInfo>
</cmn:SenderInfo>
<cmn:ReceiverInfo>
  <cmn:ToBusinessPartyLookupId type="COMPANYSITEID">312333</cmn:ToBusinessPartyLookupId>
  <!--<cmn:ShipToLocationLookupId type="COMPANYSITEID">12346579963</cmn:ShipToLocationLookupId-->
  <cmn:ShipToLocationInfo>
    <cmn:FacilityId type="GLN">8887771013655</cmn:FacilityId>
    <cmn:FacilityId type="COMPANYSITEID">312333</cmn:FacilityId>
    <cmn:LocationInfo>
      <cmn:BusinessName>Watson Rx Wholesaler Sacramento</cmn:BusinessName>
      <cmn:Street1>555 Neelan Road</cmn:Street1>
      <cmn:City>Sacramento</cmn:City>
      <cmn:Village></cmn:Village>
      <cmn:HouseNumber></cmn:HouseNumber>
      <cmn:Township></cmn:Township>
      <cmn:StateOrRegion>CA</cmn:StateOrRegion>
      <cmn:PostalCode>95833</cmn:PostalCode>
      <cmn:Country>US</cmn:Country>
      <cmn:CorporateFax></cmn:CorporateFax>
    </cmn:LocationInfo>
  </cmn:ShipToLocationInfo>
</cmn:ReceiverInfo>

```

```

        <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000156</cmn:AddressObjectGUID>
        <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbf</cmn:HouseGUID>
        <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
        <cmn:PremisesCode></cmn:PremisesCode>
    </cmn:LocationInfo>
    <cmn:LicenseNumber state="CA" agency="BOP">3333300008701</cmn:LicenseNumber>
    <cmn:ContactInfo>
        <cmn:Name>Watson Customer Service</cmn:Name>
        <cmn:Telephone>+1-916-555-3301</cmn:Telephone>
        <cmn:Email>support@watsonrxwholesaler.com</cmn:Email>
    </cmn:ContactInfo>
</cmn:ShipToLocationInfo>
</cmn:ReceiverInfo>
<cmn:CarrierInfo>
    <!--<cmn:CarrierBusinessPartyLookupId type="IN_COMPANY_ID">s95</cmn:CarrierBusinessPartyLookupId>--
->
    <cmn:CarrierBusinessPartyInfo>
        <cmn:BusinessId type="SGLN">8887777.01384.0</cmn:BusinessId>
        <cmn:BusinessId type="GLN">8887771013655</cmn:BusinessId>
        <cmn:BusinessClassification>WHOLESALE</cmn:BusinessClassification>
        <cmn:BusTransactionRole>BillShipTo</cmn:BusTransactionRole>
        <cmn:BusinessInfo>
            <cmn:BusinessName>Watson Rx Wholesaler Sacramento</cmn:BusinessName>
            <cmn:Street1>555 Neelan Road</cmn:Street1>
            <cmn:City>Sacramento</cmn:City>
            <cmn:Village></cmn:Village>
            <cmn:HouseNumber></cmn:HouseNumber>
            <cmn:Township></cmn:Township>
            <cmn:StateOrRegion>CA</cmn:StateOrRegion>
            <cmn:PostalCode>95833</cmn:PostalCode>
            <cmn:Country>US</cmn:Country>
            <cmn:CorporateFax></cmn:CorporateFax>
            <cmn:AddressObjectGUID>19406454-0022-000C-00B0-000000000156</cmn:AddressObjectGUID>
            <cmn:HouseGUID>986f2934-be05-438f-A30E-c15b90e15dbf</cmn:HouseGUID>
            <cmn:TaxRegistrationCode></cmn:TaxRegistrationCode>
            <cmn:PremisesCode></cmn:PremisesCode>
        </cmn:BusinessInfo>
    </cmn:CarrierBusinessPartyInfo>
</cmn:CarrierInfo>

```

```

</som:OrderDetails>
<cmn:WarehouseOperatorName>Operator</cmn:WarehouseOperatorName>
<som:AddReceivedItems>
  <cmn:Serial format="AI (01)+AI (21) ">015088202501033321100000060001</cmn:Serial>
  <cmn:Serial format="AI (01)+AI (21) ">015088202501033321100000060002</cmn:Serial>
</som:AddReceivedItems>
<som:RemoveReceivedItems>
  <cmn:Serial format="AI (01)+AI (21) ">015088202501033321100000060012</cmn:Serial>
</som:RemoveReceivedItems>
</som:MessageBody>
</som:SOMReceiptMessage>

```

## Errors

| Data Element                             | Error Message                                                                                | Description                                                                                     |
|------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                           |                                                                                              |                                                                                                 |
| cmn:BusinessId   @type                   | Valid from business party BusinessId type is required !!!                                    | The error occurs if the source is present, but there is no matching entry in the lookup file.   |
|                                          | Party type attribute is required if carrier party BusinessId is present !!!                  | The error occurs if BusinessId is populated, but the source is empty or null.                   |
|                                          | Valid carrier party BusinessId type is required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.   |
|                                          | Party type attribute is required if source from business party cmn:BusinessId is present !!! | The error occurs if BusinessId is populated, but the source is empty or null.                   |
| cmn:BusinessName                         | Carrier name in source cmn:BusinessName is required if cmn:BusinessInfo is present !!!       | The error occurs if BusinessInfo is populated, but the source is empty or null.                 |
| cmn:CarrierBusinessPartyLookupId   @type | Valid CarrierBusinessPartyLookupId type is required !!!                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.   |
|                                          | Party type attribute is required if source CarrierBusinessPartyLookupId is present !!!       | The error occurs if CarrierBusinessPartyLookupId is populated, but the source is empty or null. |
| cmn:City                                 | Carrier city in source cmn:BusinessName is required if cmn:BusinessInfo is present !!!       | The error occurs if BusinessInfo is populated, but the source is empty or null.                 |
| cmn:ContractType                         | Valid Contract Type is required !!!                                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.   |

| Data Element                          | Error Message                                                                             | Description                                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| cmn:Country                           | Carrier country in source cmn:BusinessName is required if cmn:BusinessInfo is present !!! | The error occurs if BusinessInfo is populated, but the source is empty or null.                                                   |
| cmn:FacilityId                        | Receiver facility location identifier is required if LocationInfo group is present !!!    | The error occurs if LocationInfo is present, but ShipToLocationLookupId is empty or null.                                         |
|                                       | Ship from facility location identifier is required if LocationInfo group is present !!!   | The error occurs if LocationInfo is present, but ShipFromLocationLookupId is empty or null.                                       |
| cmn:FacilityId   @type                | Valid ship to FacilityId type is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.                                     |
|                                       | Valid party type attribute is required when ship to FacilityId is present !!!             | The error occurs if FacilityId is populated, but the source is empty or null.                                                     |
|                                       | Valid party type attribute is required when source ship from FacilityId is present !!!    | The error occurs if FacilityId is populated, but the source is empty or null.                                                     |
|                                       | Valid ship from FacilityId type is required !!!                                           | The error occurs if the source is present, but there is no matching entry in the lookup file.                                     |
| cmn:FromBusinessPartyLookupId   @type | Party type attribute is required if source FromBusinessPartyLookupId is present !!!       | The error occurs if FromBusinessPartyLookupId is populated, but the source is empty or null.                                      |
|                                       | Valid FromBusinessPartyLookupId type is required !!!                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                                     |
| cmn:LocationId                        | Location ID is required !!!                                                               | The error occurs if the source is empty or null.                                                                                  |
| cmn:OrderItem   choice%1              | One of InternalMaterialCode OR PackagingItemCode OR CountryDrugCode is required !!!       | The error occurs if cmn:InternalMaterialCode, cmn:PackagingItemCode, and cmn:CountryDrugCode are empty or null.                   |
|                                       | Only one of InternalMaterialCode OR PackagingItemCode OR CountryDrugCode is required !!!  | The error occurs if more than one value is provided for cmn:InternalMaterialCode, cmn:PackagingItemCode, and cmn:CountryDrugCode. |
| cmn:PackagingItemCode   @type         | Valid Item Code Type is required !!!                                                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                                     |
|                                       | Product type attribute is required when source PackagingItemCode is present !!!           | The error occurs if PackagingItemCode is populated, but the source is empty or null.                                              |
| cmn:PostalCode                        | Carrier postal code in source cmn:BusinessName is required if                             | The error occurs if BusinessInfo is populated, but the source is empty                                                            |

| Data Element                                | Error Message                                                                                             | Description                                                                                     |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|                                             | cmn:BusinessInfo is present !!!                                                                           | or null.                                                                                        |
| cmn:Quantity                                | Quantity greater than 0 is required !!!                                                                   | The error occurs if the source is empty or null.                                                |
| cmn:ReceiptDistributionType                 | Valid receipt distribution type is required !!!                                                           | The error occurs if the source is populated, but the source is empty or null.                   |
| cmn:ReceiverInfo   <b>choice%1</b>          | Missing mandatory choice. One of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!     | The error occurs if neither ToBusinessPartyLookupId or ToBusinessPartyInfo are present.         |
|                                             | Only one of ToBusinessPartyLookupId OR ToBusinessPartyInfo group is required !!!                          | The error occurs if both ToBusinessPartyLookupId and ToBusinessPartyInfo are present.           |
| cmn:ReceiverInfo   <b>choice%2</b>          | Only one of ShipToLocationLookupId OR ShipToLocationInfo group is required !!!                            | The error occurs if both ShipToLocationLookupId and ShipToLocationInfo are present.             |
| cmn:SenderInfo   <b>choice%1</b>            | Only one of FromBusinessPartyLookupId OR FromBusinessPartyInfo group is required !!!                      | The error occurs if both FromBusinessPartyLookupId and FromBusinessPartyInfo are present.       |
|                                             | Missing mandatory choice. One of FromBusinessPartyLookupId OR FromBusinessPartyInfo group is required !!! | The error occurs if neither FromBusinessPartnerLookupId or FromBusinessPartyInfo are present.   |
| cmn:SenderInfo   <b>choice%2</b>            | Only one of ShipFromLocationLookupId OR ShipFromLocationInfo group is required !!!                        | The error occurs if both cmn:ShipFromLocationLookupId and cmn:ShipFromLocationInfo are present. |
| cmn:ShipFromCountryCode                     | Valid ShipTo Country Code is required !!!                                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.   |
| cmn:ShipFromLocationLookupId   <b>@type</b> | Valid ShipFromLocationLookupId is required !!!                                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.   |
|                                             | Valid party type attribute is required when source ShipFromLocationLookupId is present !!!                | The error occurs if ShipFromLocationLookupId is populated, but the source is empty or null.     |
| cmn:ShipToLocationLookupId   <b>@type</b>   | Valid party type attribute is required when source ShipToLocationLookupId is present !!!                  | The error occurs if ShipToLocationLookupId is populated, but the source is empty or null.       |
|                                             | Valid ShipToLocationLookupId type is required !!!                                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.   |
| cmn:StateOrRegion                           | Carrier StateOrRegion in source cmn:BusinessName is required if cmn:BusinessInfo is present !!!           | The error occurs if BusinessInfo is populated, but the source is empty or null.                 |
| cmn:Street1                                 | Carrier Street1 in source cmn:BusinessName is required if cmn:BusinessInfo is present !!!                 | The error occurs if BusinessInfo is populated, but the source is empty or null.                 |

| Data Element                        | Error Message                                                                                                                                                                                                                                                                                                                                                                                      | Description                                                                                                                            |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| cmn:SupplyType                      | Valid Supply Type is required !!!                                                                                                                                                                                                                                                                                                                                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                          |
| cmn:ToBusinessPartyLookupId   @type | Party type attribute is required if source ToBusinessPartyLookupId is present !!!                                                                                                                                                                                                                                                                                                                  | The error occurs if ToBusinessPartyLookupId is populated, but the source is empty or null.                                             |
|                                     | Valid ToBusinessPartyLookupId type is required !!!                                                                                                                                                                                                                                                                                                                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                                          |
| cmn:TransactionIdentifier           | Transaction identifier is required !!!                                                                                                                                                                                                                                                                                                                                                             | The error occurs if the source is empty or null.                                                                                       |
| cmn:TransactionIdentifier   @type   | Valid Transaction Identifier type is required !!!                                                                                                                                                                                                                                                                                                                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                          |
| cmn:UnitPrice   @currencyCode       | Currency Code is required if Unit Price exists !!!                                                                                                                                                                                                                                                                                                                                                 | The error occurs if UnitPrice is populated, but the source is empty or null.                                                           |
| Class 2                             |                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                        |
| @currencyCode                       | CurrencyCode for shipping event for delivery <DeliveryNumber> not found.                                                                                                                                                                                                                                                                                                                           | The error occurs if UnitPrice is populated, but the source is empty or null.                                                           |
| cmn:CarrierBusinessPartyLookupId    | Could not perform Master Data lookup to populate transportation carrier business address fields. <CarrierBusinessPartyLookupId / type> <CarrierBusinessPartyLookupId > is not configured in your Company or Partner Company Master Data. Please configure <CarrierBusinessPartyLookupId / type> <CarrierBusinessPartyLookupId > in Company or Partner Company Master Data, and reprocess the file. | The error occurs if cmn:CarrierBusinessPartyLookupId   @type or the source is empty or null in Company or Partner Company Master Data. |
| cmn:ContractType                    | Contract Type is required if Ship To Country Code = RU.                                                                                                                                                                                                                                                                                                                                            | The error occurs if cmn:ShipToCountryCode = "RU" but the source is empty or null.                                                      |
| cmn:FromBusinessPartyLookupId       | Could not perform Master Data lookup to populate sender business address fields. <FromBusinessPartyLookupId / type> <FromBusinessPartyLookupId> is not configured in your Company or Partner Master Data. Please configure <FromBusinessPartyLookupId / type> <FromBusinessPartyLookupId> in Company or Partner Master Data, and reprocess the file.                                               | The error occurs if cmn:FromBusinessPartyLookupId   @type or the source is empty or null in Company or Partner Company Master Data.    |
| cmn:FundingSource                   | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU.                                                                                                                                                                                                                                                                                                         | The error occurs if both cmn:ShipToCountryCode and cmn:ShipFromCountryCode = "RU", but the source is empty or null.                    |
| cmn:Serial                          | Serial Number <ParentSerial> reference in aggregation but not present in ReceivingEvent / NumberList                                                                                                                                                                                                                                                                                               | The error occurs if the source is not present in ReceivingEvent   NumberList.                                                          |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Description                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| cmn:ShipFromLocationLookupId                                                                                                                                      | Could not perform Master Data lookup to populate sender shipping address fields. <ShipFromLocationLookupId / type><br><ShipFromLocationLookupId> is not configured in your Company or Partner Location Master Data. Please configure <ShipFromLocationLookupId / type> <ShipFromLocationLookupId> in Company or Partner Location Master Data, and reprocess the file.                                                                                                         | The error occurs if cmn:ShipFromLocationLookupId   @type or the source is empty or null in Company or Partner Location Master Data.              |
| cmn:ShipToLocationLookupId                                                                                                                                        | Could not perform Location Master Data lookup to populate receiver shipping address fields. <ShipToLocationLookupId / type><br><ShipToLocationLookupId> is not configured in your Company Location Master Data nor in your Partner Location Master Data. Please configure <ShipToLocationLookupId / type> <ShipToLocationLookupId> in Company Location Master Data or in Partner Location Master Data (if the ship to location is a partner location) and reprocess the file. | The error occurs if cmn:ShipToLocationLookupId   @type or the source is empty or null in Company or Partner Location Master Data.                |
| cmn:ToBusinessPartyLookupId                                                                                                                                       | Could not perform Company Master Data lookup to populate receiver business address fields. <ToBusinessPartyLookupId / type><br><ToBusinessPartyLookupId> is not configured in your Company Master Data. Please configure <ToBusinessPartyLookupId / type> <ToBusinessPartyLookupId> in Company Master Data, and reprocess the file.                                                                                                                                           | The error occurs if cmn:ToBusinessPartyLookupId   @type or the source is empty or null in Company or Partner Company Master Data.                |
| cmn:transactionIdentifier   @date                                                                                                                                 | Order Item Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                                                                                                                                                                                                                                                                                                              | The error occurs if cmn:ShipToCountryCode = "RU" but the source is empty or null.                                                                |
| cmn:UnitPrice                                                                                                                                                     | Unit Price is required if Ship To Country Code is RU and Ship From Country Code is any of RU, AM, BY, KZ, KG.                                                                                                                                                                                                                                                                                                                                                                 | The error occurs if cmn:ShipToCountryCode = "RU" and cmn:ShipFromCountryCode = "AM", "BY", "KG", "KZ", or "RU", but the source is empty or null. |
| N/A                                                                                                                                                               | Could not commission parent serial number <ParentSerial> because it is not an SSCC Number                                                                                                                                                                                                                                                                                                                                                                                     | The error occurs if ParentSerial is not an SSCC Number.                                                                                          |
|                                                                                                                                                                   | Cannot perform operation on serial number <serial number> with serial number item state <item state>. This operation can only be performed when the serial number is Pending Receipt or Shipped.                                                                                                                                                                                                                                                                              | The error occurs if Serial Number was not shipped.                                                                                               |
|                                                                                                                                                                   | Serial Number <ParentSerial> reference in aggregation but not present in ReceivingEvent / NumberList                                                                                                                                                                                                                                                                                                                                                                          | The error occurs if validation fails regarding all top most parent serial numbers being present in ReceivingEvent   <b>NumberList</b> elements.  |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                  |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                  |

# ESM Receipt (EPCIS v1.2)

## Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_ESM\_RECEIPT

**Info Exchange Display Name:** ESM Receipt

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type     | Description                                                                                                                 |
|---------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                |
| @schemaVersion      | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup> |
| @creationDate       | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                               |

<sup>1</sup>1.2

<sup>2</sup>2016-12-18T22:08:02Z



| Data Element                        |  |                    |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------|--|--------------------|--|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPCISHeader                         |  |                    |  | 0...1<br>-    | -      | The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| sbdh:StandardBusinessDocumentHeader |  |                    |  | 1...1<br>-    | -      | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                     |  | sbdh:HeaderVersion |  | 1...1<br>0/*  | String | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to 1.0. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                     |  | sbdh:Sender        |  | 1...*<br>-    | -      | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                              |
|                                     |  | sbdh:Identifier    |  | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>2</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p> GLNs do not have an urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|                                     |  | @Authority         |  | 1...1<br>1/*  | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to GLN for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>3</sup></p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                    |
|                                     |  | sbdh:Receiver      |  | 1...*<br>-    | -      | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                             |
|                                     |  | sbdh:Identifier    |  | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup> Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul>                                                                                                                                                                                                                       |

<sup>1</sup>1.0<sup>2</sup>1100001014507<sup>3</sup>GLN<sup>4</sup>0614141123452

| Data Element |  |                             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                      |
|--------------|--|-----------------------------|--------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                             |                          |               |          | <p> GLNs do not have an urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p>                                                                                                            |
|              |  |                             | @Authority               | 1...1<br>1/*  | String   | <p><b>Required.</b> The receiver identifier type. The Authority was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>1</sup></p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  | sbdh:DocumentIdentification |                          | 1...1<br>-    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                              |
|              |  |                             | sbdh:Standard            | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>2</sup>                                                                                                                                                                   |
|              |  |                             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a> . <sup>3</sup>                                                           |
|              |  |                             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>4</sup>                                                                                          |
|              |  |                             | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> Identifies the document type. The <b>sbdh:Type</b> value is set to <a href="#">Events</a> for a shipment event. <sup>5</sup>                                                                                                                                                                                    |
|              |  |                             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <a href="#">Z</a> .                               |
|              |  | extension                   |                          | 0...1<br>-    | -        | Header extension area with master data attributes.                                                                                                                                                                                                                                                                               |
|              |  |                             | EPCISMasterData          | 0...1<br>-    | -        | <p>Master data extension header. May contain business and location address information for receiving event.</p> <p> Full GS1 conformance requires that all party master data be stored in the EPCIS header extension EPCISMasterData</p>      |

<sup>1</sup>GLN<sup>2</sup>EPCglobal<sup>3</sup>1.0<sup>4</sup>201609201745200001<sup>5</sup>Events

| Data Element |  |  |  |  |  |  |                       | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|--|--|--|-----------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                       |               |        | I VocabularyList   Vocabulary   VocabularyElementList   <b>VocabularyElement</b> . It is strongly urged that all business and location address information for the receiving event is sent in the <b>VocabularyElement</b> within the <b>EPCISMasterData</b> header extension.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | VocabularyList        | 1...1<br>-    | -      | <b>Required.</b> Vocabulary list group master data elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  |  | Vocabulary(1)         | 0...*<br>-    | -      | Instance 1 of looping vocabulary group with discrete master data element groups for product code. Instance 1 of <b>Vocabulary</b> will occur once for all instances of item master data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | @type                 | 1...1<br>0/*  | String | Identifies product master data elements. Product master data is defined by VocabularyElement   @id. Valid value: <code>urn:epcglobal:epcis:vtype:EPCClass</code> = product master data. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  |  | VocabularyElementList | 0...1<br>-    | -      | List of vocabulary elements containing master data attributes for each unique product code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  |  | VocabularyElement     | 0...*<br>-    | -      | <p>Looping vocabulary element which identifies each unique China product code, NTIN, or SGTIN for product master data from epc serial number in ObjectEvent Commissioning: epcList/epc. SSCC codes not included in <b>VocabularyElement</b> product master data.</p> <p><b>i</b> To conform with GS1 standards, master data attributes should be sent in the <b>VocabularyElement</b>. Each unique SGTIN, NTIN, or China Product Code embedded in Commissioning event epcList/epc serial numbers should be sent in one instance of <b>VocabularyElement</b>.</p>                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | @id                   | 1...1<br>0/*  | String | <p>Identifies the product code for which master data is being sent in the <b>VocabularyElement</b> loop.<sup>2</sup> VocabularyElement   @id = SGTIN, NTIN, or China Product Code with GS1-conformant urn or http prefix. These are the only values supported in this element. All other product identifier types will be sent as additional trade item types. SSCC codes are not identified in any part of the <b>VocabularyElement</b> group.</p> <p>Product code, if provided, must match the product code embedded within the serial number in the epc code in one or more commissioning events.</p> <p>China</p> <ul style="list-style-type: none"> <li>Prefix: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/</code></li> <li>Example: <code>http://epcis.tracelink.com/hc/cn-edmc/obj/10230.*</code></li> </ul> <p>NTIN</p> |

<sup>1</sup>urn:epcglobal:epcis:vtype:EPCClass<sup>2</sup>urn:epc:idpat:sgtin:0030001.0012345.\*

| Data Element |  |  |  |  |  |  |           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|--|--|-----------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |           |               |        | <ul style="list-style-type: none"> <li>Prefix: <code>urn:epc:id:sgtin:</code></li> <li>Example: <code>urn:epc:id:sgtin:415001647778.0.10000000022</code></li> </ul> <p>SGTIN (strongly recommended for GS1 conformance)</p> <ul style="list-style-type: none"> <li>Prefix: <code>urn:epc:idpat:sgtin:</code></li> <li>Example: <code>urn:epc:idpat:sgtin:0030001.0012345.*</code></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  |  | attribute | 1...1<br>1/*  | String | <p><b>Conditionally required</b> if item master data attributes sent in <b>VocabularyElement</b>. Instance 1 of attribute for packaging level value identified by <code>@id</code>.<sup>1</sup></p> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <p><b>Required.</b> Attribute identifying packaging level.</p> <p>Valid value: <code>http://epcis.tracelink.com/mda/packageTypeCode</code><sup>2</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | <p>Instance 2 of attribute for internal material number in Pharmaceutical Manufacturer's internal system identified by <code>@id</code>. Identified by the value in attribute element (instance 3) in the current loop = <code>MANUFACTURER_PART_NUMBER</code>.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying internal material code.</p> <p>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code><sup>4</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute   <code>@id</code> (instance 2) is populated. Instance 3 of attribute for internal material number identifier type for the product.</p> <p>Valid value: <code>MANUFACTURER_PART_NUMBER</code><sup>5</sup></p> <p>Sequence of fields for internal material number is:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;100335&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;MANUFACTURER_PART_NUMBER&lt;/attribute&gt;</code></li> </ol> <div>  If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown. </div> |

<sup>1</sup>UN<sup>2</sup>`http://epcis.tracelink.com/mda/packageTypeCode`<sup>3</sup>100335<sup>4</sup>`urn:epcglobal:cbv:mda#additionalTradeItemIdentification`<sup>5</sup>`MANUFACTURER_PART_NUMBER`

| Data Element |  |  |  |  |  |  |  |           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|--|--|--|-----------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | <b>Required.</b> Id attribute identifying internal material code.<br>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code> <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | Instance 4 of attribute for country drug code for all national drug code types, identified by the enum value in the next attribute element (instance 5) in the current loop and by the attribute   @id value as an additional trade item. <sup>2</sup><br>Country drug code type defined by value in next attribute element (instance 5) where @id = <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</code> OR <code>http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</code>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  |  |  | @id       | 1...1<br>0/*  | String | Id attribute identifying internal material code.<br>Valid value: <code>urn:epcglobal:cbv:mda#additionalTradeItemIdentification</code> <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  |  | attribute | 0...1<br>0/*  | String | <p><b>Conditionally required</b> if the previous name/value pair attribute   @id (instance 4) is populated. Instance 5 of attribute for country drug code identifier type. Must follow attribute with country drug value.<sup>4</sup><br/>Sequence of fields for country drug code is:</p> <p>GS1:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode"&gt;FDA_NDC_11&lt;/attribute&gt;</code></li> </ol> <p>TraceLink:</p> <ol style="list-style-type: none"> <li><code>&lt;attribute id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification"&gt;82025030221&lt;/attribute&gt;</code></li> <li><code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode"&gt;US_NDC442&lt;/attribute&gt;</code></li> </ol> <div> <p> If this sequence is not followed as documented above in the input file, the internal material number will not be mapped into the TraceLink system and no error will be thrown.</p> </div> <p>The following qualifiers have been defined by GS1 as additional trade item types:</p> |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode<sup>2</sup>82025030221<sup>3</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentification<sup>4</sup>FDA\_NDC\_11

| Data Element |  |  |  |  |  |                       |     |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|--|-----------------------|-----|--|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                       |     |  |               |        | <ul style="list-style-type: none"> <li>MANUFACTURER_PART_NUMBER = Internal material number</li> <li>FDA_NDC_11 = US NDC542</li> <li>DIN = Canada Drug ID number</li> <li>PHARMACODE_CH = Swiss Pharma Code</li> <li>NAN = Nordic article number</li> </ul> <p>To identify these material number types, use attribute   @id string:<br/> <a href="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</a>.</p> <p>For all other country drug code types, use attribute   @id string:<br/> <a href="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</a>.</p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  |                       | @id |  | 1...1<br>0/*  | String | <p><b>Required.</b> Id attribute identifying country drug code type. Valid values:<sup>1</sup></p> <ul style="list-style-type: none"> <li>GS1: <a href="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</a></li> <li>TraceLink: <a href="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</a></li> </ul>                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | Vocabulary(2)         |     |  | 0...*<br>-    | -      | <p>Instance 2 of vocabulary element with party master data element groups.</p> <p> Group is optional. If it does not appear in master data header extension, no error will be thrown. If the group is populated, <b>Vocabulary</b> occurs once for all instances of party address master data present in the message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | @type                 |     |  | 1...1<br>0/*  | String | <p><b>Required.</b> Vocabulary type identifying location master data elements. Master data type defined by VocabularyElement   @id. Valid value: <a href="urn:epcglobal:epcis:vtype:Location">urn:epcglobal:epcis:vtype:Location</a> = party master data.<sup>2</sup></p> <p> From business party, ship-from, to business party, and ship-to for receiving event all tracked in header master data. Party data in receiving event to be mapped from header master in <b>Vocabulary</b>.</p>                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | VocabularyElementList |     |  | 0...1<br>-    | -      | List of vocabulary elements that includes all partner master information. Party identifiers and address info are stored in instances of the looping group <b>VocabularyElement</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  | VocabularyElement     |     |  | 0...1         | -      | Looping group header for data elements that identify all business party and location master data, including identifiers,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode<sup>2</sup>urn:epcglobal:epcis:vtype:Location

| Data Element |  |  |  |  |  |  |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|--|--|--|-----|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |     |               |        | <p>identifier types, and address info.</p> <p><b>VocabularyElement</b> repeats once for each party type:</p> <ul style="list-style-type: none"> <li>Sold/Transfer from business party (Mandatory if group is populated)</li> <li>Ship from location (Optional)</li> <li>Sold/Transfer to business party (Mandatory if group is populated)</li> <li>Ship to location (Optional)</li> <li>Carrier (Optional)</li> </ul> <div> <p> Note:</p> <ul style="list-style-type: none"> <li>If party address info is added to <b>Vocabulary</b> element in message header, create one instance of <b>VocabularyElement</b> for each party type created.</li> <li>Master Data lookup is supported. If Partner Master Data is available in TraceLink, indicate master data lookup by sending partner identifiers in the <b>sourceList</b> and <b>destinationList</b> of the receiving event and do not include any address data in any <b>VocabularyElement</b> group.</li> <li>If Master Data lookup is not intended, send complete address information for at least the sold-from and sold-to partners in the header Master Data extension. Ship-from and ship-to addresses can also be included.</li> </ul> </div> |
|              |  |  |  |  |  |  | @id | 1...1<br>0/*  | String | <p><b>Required.</b> SGLN or other partner identifier and type for party master data in <b>VocabularyElement</b>.<sup>1</sup></p> <p>Must match <b>sourceList</b> or <b>destinationList</b> owning, or location party in receiving event from ObjectEvent   extension   sourceList   <b>source</b> (transfer from, carrier) OR ObjectEvent   extension   destinationList   <b>destination</b> (transfer to).</p> <p>The identifier value is mandatory for regulatory reporting. The identifier type must include a valid urn or http string prefix. Valid prefix formats include by namespace:</p> <ul style="list-style-type: none"> <li>GS1: <code>urn:epc:id:sgln:[CompanyPrefix].[LocationReference].[Extension]</code></li> <li>GS1 USHC: <code>http://epcis.gs1us.org/hc/[identifierType]/loc/[identificationValue]</code></li> <li>GS1 Brazil: <code>http://epcis.gs1br.org/hc/[identifierType]/loc/[identificationValue]</code></li> <li>TraceLink: <code>http://epcis.tracelink.com/hc/[identifierType]/loc/[identificationValue]</code></li> </ul> <p>GLN is not supported, only SGLN.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p>                                                                                               |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0

| Data Element |  |  |  |  |  |  |              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--|--|--|--------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | attribute(1) | 1...1<br>0/*  | String | <p><b>Conditionally required.</b> Looping name/value pairs which identify partner address master data elements. This is the value element in the name/value pair attribute   <b>@id</b>. Stores master data item value defined by <b>@id</b>.<sup>1</sup></p> <p>Partner master data items currently supported:</p> <p>Create one instance of the name/value pair <b>attribute</b> and attribute   <b>@id</b> for each master data element returned.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  |  | @id          | 1...1<br>0/*  | String | <p><b>Required.</b> The name in the name/value pair attribute   <b>@id</b>. Identifies the master data value stored in the attribute value element, using urn or http prefix. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>urn:epcglobal:cbv:mda#name</li> <li>urn:epcglobal:cbv:mda#streetAddressOne</li> <li>urn:epcglobal:cbv:mda#streetAddressTwo</li> <li>urn:epcglobal:cbv:mda#streetAddressThree</li> <li>urn:epcglobal:cbv:mda#city</li> <li>http://epcis.tracelink.com/mda/district</li> <li>http://epcis.tracelink.com/mda/village</li> <li>http://epcis.tracelink.com/mda/houseNumber</li> <li>http://epcis.tracelink.com/mda/township</li> <li>http://epcis.tracelink.com/mda/corporateFax</li> <li>urn:epcglobal:cbv:mda#state</li> <li>urn:epcglobal:cbv:mda#postalCode</li> <li>urn:epcglobal:cbv:mda#countryCode</li> <li>http://epcis.tracelink.com/mda/AddressObjectGUID</li> <li>http://epcis.tracelink.com/mda/HouseGUID</li> <li>http://epcis.tracelink.com/mda/partyRoleCode</li> <li>http://epcis.tracelink.com/mda/premisesCode</li> <li>http://epcis.tracelink.com/mda/taxRegistrationCode</li> </ul> |
|              |  |  |  |  |  |  | attribute(2) | 0...*<br>0/*  | String | <p><b>Required.</b> Looping name/value pairs identifying additional party identifier elements. This is the value element in the name/value pair attribute   <b>@id</b>. Stores additional party identifiers and identifier types defined by <b>@id</b>.<sup>3</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>Kendall Pharma<sup>2</sup>urn:epcglobal:cbv:mda#name<sup>3</sup>10023141



| Data Element |  |  |  |  |  |  |  |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--|--|-----|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |  |     |               |        | <p>Partner master data items currently supported:</p> <ul style="list-style-type: none"> <li>• Additional party identifier - Optional (1 or more supported).</li> <li>• Additional party identifier type - Optional (1 or more supported).</li> </ul> <p>Create one instance of the name/value pair <b>attribute</b> and <b>@id</b> for each master data element returned. Must send the additional party identifiers in a double attribute combination using the following sequence:</p> <ol style="list-style-type: none"> <li>1. Attribute 1 identifies and provides the party identifier value.</li> <li>2. Attribute 2 identifies the party identifier type.</li> </ol> <p>For example:</p> <ol style="list-style-type: none"> <li>1. <code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue"&gt;10023141&lt;/attribute&gt;</code></li> <li>2. <code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode"&gt;DUNS_PLUS_FOUR&lt;/attribute&gt;</code></li> </ol> <p>OR</p> <ol style="list-style-type: none"> <li>1. <code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifier"&gt;10023141&lt;/attribute&gt;</code></li> <li>2. <code>&lt;attribute id="http://epcis.tracelink.com/mda/additionalIdentifierType"&gt;DUNS4&lt;/attribute&gt;</code></li> </ol> <div> <p> If this sequence of double attributes is not followed for additional party identifiers, the additional party identifier will not be mapped to the TraceLink system and no error will be thrown.</p> </div> <div> <p> Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>• RU_INN_FOREIGN_ENTITY</li> <li>• RU_INN_INDIV</li> <li>• RU_INN_LOCAL_ENTITY</li> </ul> </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  |  |  | @id | 1...1         | String | <b>Required.</b> Provides the name in the name/value pair attribute   <b>@id</b> . Identifies the master data value stored in the attribute                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Data Element |  |             |                     |  |  |  |  |  |  | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|-------------|---------------------|--|--|--|--|--|--|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |             |                     |  |  |  |  |  |  |               |          | 1 <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</a></li> <li><a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</a></li> </ul>                                                |
| EPCISBody    |  |             |                     |  |  |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                                                   |
|              |  | EventList   |                     |  |  |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> The <b>EventList</b> has the following structure: <ul style="list-style-type: none"> <li><b>ObjectEvent</b> (0 or more for commissioning).</li> <li><b>AggregationEvent</b> (One or more for aggregation).</li> <li><b>ObjectEvent</b> (One for shipping).</li> </ul> <div> <i>Order of events is not enforced by the schema.</i> </div>                                                             |
|              |  | choice      |                     |  |  |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> Only one of the following choice options may be selected in any one loop on EPCISBody   <b>EventList: ObjectEvent</b> OR <b>AggregationEvent</b> .                                                                                                                                                                                                                                                   |
|              |  | ObjectEvent |                     |  |  |  |  |  |  | 0...*<br>-    | -        | Choice 1 for <b>EventList</b> . Data = <b>ObjectEvent</b> for the Commissioning Events.<br><b>EventList = ObjectEvent</b> Commissioning when all of the following is true: <ul style="list-style-type: none"> <li><b>action</b> = <b>ADD</b></li> <li><b>bizStep</b> = <a href="#">urn:epcglobal:cbv:bizstep:commissioning</a></li> <li><b>disposition</b> = <a href="#">urn:epcglobal:cbv:disp:active</a></li> </ul> |
|              |  |             | eventTime           |  |  |  |  |  |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Includes a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                                                                                             |
|              |  |             | eventTimeZoneOffset |  |  |  |  |  |  | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect time and place where the event occurred, consistent with what choice is made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>3</sup>                                                                                                                                                                                                                       |
|              |  |             | epcList             |  |  |  |  |  |  | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet commissioned.                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup><http://epcis.tracelink.com/mda/additionalPartyIdentificationValue><sup>2</sup>2017-05-30T22:08:02Z<sup>3</sup>-04:00

| Data Element |  |  |  |                  | Occurs Length | Type   | Description                                                                                                                                                    |
|--------------|--|--|--|------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | epc              | 1...*<br>1/*  | String | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>1</sup>                    |
|              |  |  |  | action           | 1...1<br>0/*  | String | <b>Required.</b> The <b>action</b> value must equal <b>ADD</b> . <sup>2</sup>                                                                                  |
|              |  |  |  | bizStep          | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:commissioning</b> . <sup>3</sup>                                             |
|              |  |  |  | disposition      | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:active</b> . <sup>4</sup>                                                   |
|              |  |  |  | readPoint        | 0...1<br>-    | -      | The <b>readPoint</b> element is optional in commissioning event.                                                                                               |
|              |  |  |  | id               | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>5</sup> |
|              |  |  |  | extension        | 0...1<br>-    | -      | Not used - GS1 Reserved.                                                                                                                                       |
|              |  |  |  | bizLocation      | 0...1<br>-    | -      | <b>Required.</b> Business location is mandatory in commissioning event.                                                                                        |
|              |  |  |  | id               | 1...1<br>1/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>6</sup> |
|              |  |  |  | extension        | 0...1<br>-    | -      | Main extension body for commission event.                                                                                                                      |
|              |  |  |  | ilmd             | 0...1<br>-    | -      | Instance lot master data specific to product being commissioned.                                                                                               |
|              |  |  |  | cbvmda:lotNumber | 0...1         | String | The lot or batch code for the serialized item in an alphanumeric string of up to 20 characters. <sup>7</sup>                                                   |

<sup>1</sup>urn:epc:id:sgtin:088202.5503022.100000000670<sup>2</sup>ADD<sup>3</sup>urn:epcglobal:cbv:bizstep:commissioning<sup>4</sup>urn:epcglobal:cbv:disp:active<sup>5</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>6</sup>urn:epc:id:sgln:0614141.12345.1400<sup>7</sup>ABC123

| Data Element |  |  |  |  |  |                              | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|--|------------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | cbvmda:itemExpirationDate    | 0...1<br>0/*  | Date   | The expiration date for the serialized item, in YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:commissionEventExtensions | 0...1<br>-    | -      | <p>Extensions used for Commission <b>ObjectEvent</b>.<br/>The following items can be sent in the master data header extensions:</p> <ul style="list-style-type: none"> <li>• <b>tl:packagingLevel</b></li> <li>• <b>tl:internalMaterialCode</b></li> <li>• <b>tl:packagingItemCode</b></li> <li>• tl:packagingItemCode   <b>@type</b></li> <li>• <b>tl:countryDrugCode</b></li> <li>• tl:countryDrugCode   <b>@type</b></li> </ul> <p> Full GS1 conformance requires all master data be stored in the header extension EPCISMasterData   <b>VocabularyList</b>. While master data can be sent from the commissioning event extensions, it is strongly urged that all product master data items for the commissioning event be sent in the header extensions elements.</p> |
|              |  |  |  |  |  | tl:filterValue               | 0...1<br>-    | Int    | <p><b>tl:filterValue</b> is used only if it is required by a trade partner to convert SSCC to GS1 HEX or Tag URI format. See the <a href="#">FilterValue</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  | tl:packagingLevel            | 0...1<br>0/*  | String | <p>The packaging level of the commissioned item using the supported enumeration values.<sup>2</sup></p> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data (i.e. a homogenous pallet).</p> <p>See the <a href="#">PackagingLevel</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:epcAttributes             | 0...*<br>-    | -      | Supports optional inclusion of human readable barcode content associated with each epc number in a commission event. Included only if provided in original commission event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | @epc                         | 1...1<br>1/*  | String | <b>Conditionally required.</b> The EPC serial number to which the barcodeContent is associated. The epc must be an EPC Pure Identity URI as specified in Section 6 of [TDS1.5]. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>2017-12-31<sup>2</sup>EA<sup>3</sup>urn:epc:id:sgtin:068202.0401034.11220207026272

| Data Element |  |  |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|--|--|-------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                         |               |        | <ul style="list-style-type: none"> <li>Case: SGTIN or SSCC</li> <li>Item: SGTIN</li> <li>Pallet: SSCC</li> </ul>                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  |  |  | tl:barcodeContent       | 1...1<br>1/*  | String | <b>Required.</b> The human readable barcode contents encoded in the 2D barcode with parentheses for the AI keys. <sup>1</sup>                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  |  | tl:plantLocationId      | 0...1<br>0/*  | String | Identifier of plant where products were commissioned. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | tl:productionLineId     | 0...1<br>1/*  | String | Identifier of production line where products were commissioned. <sup>3</sup>                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  |  | tl:lineManagerName      | 0...1<br>0/*  | String | Name of the person responsible as the production line manager for the commissioned products .                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  |  | tl:companyPrefix        | 0...1<br>0/*  | String | Not used.                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  |  | tl:internalMaterialCode | 0...1<br>0/*  | String | Internal material number for the product in the Pharmaceutical Manufacturer's internal systems (e.g. ERP). <sup>4</sup><br><br><div>  To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.         </div> |
|              |  |  |  |  |  |  | tl:packagingItemCode    | 0...1<br>0/*  | String | The product code for the commissioned item (e.g. GTIN-14). <sup>5</sup>                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  |  | @type                   | 1...1<br>1/*  | String | <b>Required.</b> The product code type using the supported enumeration values. <sup>6</sup><br>See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                                                                       |
|              |  |  |  |  |  |  | tl:countryDrugCode      | 0...1<br>0/*  | String | The national drug code for the commissioned item (e.g. NDC number for US products). <sup>7</sup>                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>(01)50682020401034(21)11220207026272(17)170731(10)A312101(7004)0120

<sup>2</sup>0614141.12345.1400

<sup>3</sup>PW003

<sup>4</sup>100234

<sup>5</sup>50300694220667

<sup>6</sup>GTIN-14

<sup>7</sup>0069-4220-66

| Data Element |  |  |  |  |  |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|--|------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                        |               |        | <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p>                                                                                                                                                                                                                   |
|              |  |  |  |  |  | @type                  | 0...1<br>0/*  | String | <p>The national drug code type using the supported enumeration values and any formatting instructions provided.<sup>1</sup></p> <p> To be GS1 EPCIS-conformant, send this value in the <b>VocabularyElement</b> master data, unless current item has an SSCC code with associated product master data.</p> <p>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | tl:manufacturingDate   | 0...1<br>0/10 | Date   | The date of manufacture for the serialized item, in YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:countryMarket       | 0...1<br>0/3  | Date   | <p>ISO Country code for target country market for which the product was manufactured. Used for triggering production notifications associated with a produced batch. If batch is multi-market, then production notification will be triggered at time of shipment and this field would not be populated.<sup>3</sup></p> <p>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.</p>                                                                     |
|              |  |  |  |  |  | tl:referenceDocuments  | 0...1<br>-    | -      | Reference document identifier associated with the commissioning activity.                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | tl:poNumber            | 0...1<br>0/*  | String | PO Number associated with serial number use. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  |  |  | tl:poLine              | 0...1<br>0/*  | String | PO Line number. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:workOrderNumber     | 0...1<br>0/*  | String | Work Order number associated with serial number use. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:referenceIdentifier | 0...1         | String | Reference identifier (e.g. any type of identifier) associated with serial number use. <sup>7</sup>                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>FDA\_NDC\_11<sup>2</sup>2016-12-18<sup>3</sup>IN<sup>4</sup>1001764<sup>5</sup>001<sup>6</sup>1001764-00<sup>7</sup>A100352

| Data Element |  |  |  |  |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|--|--|--|---------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:extensionField   | 0...*<br>-    | -        | <p>One or more name/value pairs which contains additional data attributes not already supported in this message. When this attribute is populated, both the <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated.</p> <p>❗ These extensions are not stored by TraceLink and are only used for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message (e.g. when a CMO is required to provide additional data fields to the brand owner). Different trade partners may have different field requirements and may require that the <b>ExtensionField</b> be populated differently per trade partner.</p> |
|              |  |  |  |  |  |  | tl:fieldName        | 1...1<br>1/*  | String   | <p>Field name provided by the trade partner that will receive the outbound message.<sup>1</sup></p> <p>❗ The field name must match the field name provided by the trade partner exactly, including case so that it can be properly detected in the outbound mapping.</p>                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  |  |  | tl:fieldValue       | 1...1<br>1/*  | String   | Field value that corresponds to <b>tl:fieldName</b> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  |  |  | AggregationEvent    | 0...*<br>-    | -        | <p><b>AggregationEvent</b> is option 2 for the <b>EventList</b> choice for the Aggregation events.<br/> <b>EventList = AggregationEvent</b> when all of the following is true:</p> <ul style="list-style-type: none"> <li>• <b>action</b> = <b>ADD</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:packing</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul>                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  |  |  | parentID            | 1...1<br>1/*  | AnyURI   | <b>Required.</b> An identifier of the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPC is of the case; for a case-to-pallet aggregation, the EPC is of the pallet). See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>NDC\_CODE<sup>2</sup>12345678901<sup>3</sup>2017-05-30T22:10:02Z<sup>4</sup>-04:00<sup>5</sup>urn:epc:id:sgtin:088202.5503022.100000000670

| Data Element |  |  |                               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                    |
|--------------|--|--|-------------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | childEPCs                     | 1...1<br>-    | -      | <b>Required.</b> This element contains a list of identifiers, including the child items, in the parent container in EPC Pure Identity URI format (e.g. for an item-to-case aggregation, the EPCs is of the items; for a case-to-pallet aggregation, the EPCs is of the cases). |
|              |  |  | epc                           | 1...*<br>1/*  | String | <b>Required.</b> The identifier of the child items in the parent container in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>1</sup>                                                                                             |
|              |  |  | action                        | 1...1<br>1/*  | String | <b>Required.</b> The <b>action</b> value must equal <b>ADD</b> for aggregation event.                                                                                                                                                                                          |
|              |  |  | bizStep                       | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:packing</b> . <sup>2</sup>                                                                                                                                                                   |
|              |  |  | disposition                   | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>3</sup>                                                                                                                                                              |
|              |  |  | readPoint                     | 0...1<br>-    | -      | Optional for Aggregation Event.                                                                                                                                                                                                                                                |
|              |  |  | id                            | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>4</sup>                                                                                                                 |
|              |  |  | extension                     | 0...1<br>-    | -      | Not used - GS1 Reserved.                                                                                                                                                                                                                                                       |
|              |  |  | bizLocation                   | 0...1<br>-    | -      | <b>Required.</b> The <b>bizLocation</b> is mandatory for Aggregation Event.                                                                                                                                                                                                    |
|              |  |  | id                            | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier.                                                                                                                              |
|              |  |  | tl:aggregationEventExtensions | 0...1<br>-    | -      | Extensions used for Aggregation Event.                                                                                                                                                                                                                                         |
|              |  |  | tl:packedStatus               | 0...1<br>0/*  | String | The packout of the item or container using the supported enumeration values. <sup>5</sup><br>See the <a href="#">PackedStatus</a> enumeration list for valid values.                                                                                                           |

<sup>1</sup>urn:epc:id:sgtin:088202.5503022.100000000670<sup>2</sup>urn:epcglobal:cbv:bizstep:packing<sup>3</sup>urn:epcglobal:cbv:disp:in\_progress<sup>4</sup>urn:epc:id:sgln:1100001.12345.0<sup>5</sup>FULL



| Data Element |  |  |  |                              | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|------------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:quantity                  | 0...1<br>-    | Int     | The quantity of child serial numbers aggregated to the parent container in this aggregation. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | tl:resetContainerAggregation | 0...1<br>-    | Boolean | Reset container aggregation flag. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | tl:epcOrderItemDetails       | 0...1<br>-    | -       | Group header for <b>epcOrderItemDetails</b> with a specific link between tl:orderItem   <b>tl:orderItemNumber</b> in the receiving event and the epc serial number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | tl:epcOrderItemList          | 1...*<br>-    | -       | Subgroup header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | @orderItemNumber             | 0...1<br>-    | String  | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> , in EPC Pure Identity URI format.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:epcOrderItem              | 1...*<br>-    | String  | Serial numbers associated with the pricing and tax information in the current instance of the ItemOrder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:extensionField            | 0...*<br>-    | -       | <p>One or more name/value pairs which contains additional data attributes not already supported in this message. When this attribute is populated, both the <b>tl:fieldName</b> and <b>tl:fieldValue</b> elements must be populated.</p> <p>❗ These extensions are not stored by TraceLink and are only used for outbound mapping purposes when there is a requirement to provide additional data to a trade partner for this message (e.g. when a CMO is required to provide additional data fields to the brand owner). Different trade partners may have different field requirements and may require that the <b>ExtensionField</b> be populated differently per trade partner.</p> |
|              |  |  |  | tl:fieldName                 | 1...1<br>1/*  | String  | <p>Field name provided by the trade partner that will receive the outbound message.<sup>3</sup></p> <p>❗ The field name must match the field name provided by the trade partner exactly, including case so that it can be properly detected in the outbound mapping.</p>                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | tl:fieldValue                | 1...1<br>1/*  | String  | Field value that corresponds to the <b>tl:fieldName</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>48<sup>2</sup>false<sup>3</sup>NDC\_CODE<sup>4</sup>12345678901

| Data Element |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|---------------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | ObjectEvent         | 1...1<br>-    | -        | <b>Required. EventList.</b> Data = <b>ObjectEvent</b> for Receiving events.<br><b>EventList = ObjectEvent</b> Receiving when all of the following is true: <ul style="list-style-type: none"> <li>• <b>action</b> = <b>OBSERVE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:receiving</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:in_progress</b></li> </ul> |
|              |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. <sup>1</sup>                                                                                                                                                                                                                                  |
|              |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> Time zone offset in effect time and place where the event occurred, consistent with what choice was made for <b>eventTime</b> . Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>                                                                                                                                                                                               |
|              |  | epcList             | 1...1<br>-    | -        | <b>Required.</b> List of the EPCs of top most containers (e.g. pallets, cases) in the shipment.                                                                                                                                                                                                                                                                                                |
|              |  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>3</sup>                                                                                                                                                                                                                                                    |
|              |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The <b>action</b> value must equal <b>OBSERVE</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                              |
|              |  | bizStep             | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:receiving</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                 |
|              |  | disposition         | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:in_progress</b> . <sup>6</sup>                                                                                                                                                                                                                                                                              |
|              |  | readPoint           | 0...1<br>-    | -        | <b>Required.</b> The location where the event occurred, i.e. the warehouse GLN location ID and storage location (e.g. shelf, bin) in URN format, that recorded the Object event.                                                                                                                                                                                                               |
|              |  | id                  | 1...1<br>0/*  | AnyURI   | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier. <sup>7</sup>                                                                                                                                                                                                                                 |

<sup>1</sup>2017-05-30T22:08:02Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sscc:030944.10105363280<sup>4</sup>OBSERVE<sup>5</sup>urn:epcglobal:cbv:bizstep:receiving<sup>6</sup>urn:epcglobal:cbv:disp:in\_progress<sup>7</sup>urn:epc:id:sgln:0614141.12345.RP1

| Data Element |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizLocation        | 0...1<br>-    | -      | Not used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | id                 | 1...1<br>1/*  | AnyURI | <b>Required.</b> Not used. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | extension          | 0...1<br>-    | -      | Not used - GS1 Reserved.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | bizTransactionList | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>bizStep</b> = <a href="#">urn:epcglobal:cbv:bizstep:shipping</a> . This element contains a list of the business transaction identifiers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | bizTransaction     | 1...*<br>0/*  | AnyURI | <p><b>Required.</b> The business transaction identifiers for the Dispatch Advice (Advance Ship Notice) and/or Invoice and/or Purchase Order governing this shipment, which are subject to Section 8.4.2 of (CBV1.0). The GLN that occurs after <a href="#">urn:epcglobal:cbv:bt:</a> is the GLN of the party that issued the number (e.g. if customer issues PO Number, customer GLN is entered. If supplier issues ASN/delivery number supplier GLN is entered).<sup>2</sup></p> <p> A delivery number or ASN is mandatory, all other transaction types are optional.</p> <p>The transaction number requirements vary by region. It is recommended that the following are always provided, when available, to fulfill compliance needs:</p> <ul style="list-style-type: none"> <li>• Purchase Order Number</li> <li>• Invoice Number</li> <li>• ASN</li> </ul> |
|              |  |  |  | @type              | 1...1<br>1/*  | String | <p><b>Required.</b> The transaction identifier type using the supported enumeration values (e.g. PO, ASN, RETURN).<sup>3</sup></p> <p> A delivery number or ASN is mandatory, all other transaction types are optional.</p> <p>See the <a href="#">TransactionId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | @date              | 0...1<br>0/*  | Date   | The transaction identifier date. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>urn:epc:id:sgln:0614141.12345.1400<sup>2</sup>urn:epcglobal:cbv:bt:0614141000029:9847856<sup>3</sup>urn:epcglobal:cbv:btt:desadv<sup>4</sup>2019-03-30

| Data Element |  |  |  |                 | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|-----------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | extension       | 0...1<br>-    | -      | <p>Main extension body for receiving event.</p> <p>❗ Source and Destination lists are optional even if party address master data is not stored in the <b>VocabularyElement</b> in the <b>EPCISMasterData</b> extension in the message header.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | sourceList      | 0...1<br>-    | -      | <p>Source list identifying sending business, location, and carrier parties.</p> <p><b>sourceList</b> supports one of two functions:</p> <ul style="list-style-type: none"> <li><b>VocabularyElement</b> populated with party address master data: <b>sourceList</b> identifies sold-from, ship-from, or carrier party. Party master data mapped from <b>VocabularyElement</b>.</li> <li><b>VocabularyElement</b> NOT populated with party address master data: <b>sourceList</b> party identifiers used for master data lookup in backend.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  | source          | 1...*<br>0/*  | String | <p><b>Required.</b> Source party identifier for sold-from, ship-from, or carrier parties. Party identifier in source either:<sup>1</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-from, ship-from, or carrier party in populated <b>VocabularyElement</b>. Party address info mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in sourceList   <b>source</b> and VocabularyElement   <b>@id</b>.</li> <li>sourceList   <b>source</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is NOT populated or there is NO match between party identifiers in source and VocabularyElement   <b>@id</b>.</li> </ol> <p>❗ If ship-from party the same as sold-from party, ship-from identifier does not need to be included.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  | @type           | 1...*<br>0/*  | String | <p><b>Required.</b> Type of source party identifier [i.e. owning (sold-from), location (ship-from), or carrier party.] Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Ship-from party = <code>urn:epcglobal:cbv:sd:owning_party</code> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | destinationList | 0...1<br>-    | -      | <p><b>Required.</b></p> <p>Identifies receiving business or location parties.</p> <p><b>destinationList</b> supports one of two functions:</p> <ol style="list-style-type: none"> <li><b>VocabularyElement</b> populated with party address master data: <b>destinationList</b> identifies sold-to, ship-to parties. Party master data mapped from <b>VocabularyElement</b>.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>urn:epc:id:sgln:088202.867701.0<sup>2</sup>urn:epcglobal:cbv:sd:owning\_party

| Data Element |  |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|--|-----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                             |               |        | 2. <b>VocabularyElement</b> NOT populated with party address master data: <b>destinationList</b> party identifiers used for master data lookup in backend.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  |  | destination                 | 1...*<br>0/*  | String | <p><b>Required.</b> Destination party identifier for sold-to or ship-to parties. Party identifier in destination either:<sup>1</sup></p> <ol style="list-style-type: none"> <li>Identifies sold-to or ship-to parties in populated <b>VocabularyElement</b>. Party address info mapped from <b>VocabularyElement</b>. Nothing is mapped from <b>VocabularyElement</b> if there is no match between party identifier in destinationList   <b>destination</b> and VocabularyElement   <b>@id</b>.</li> <li>destinationList   <b>destination</b> supports master data lookup in TraceLink system. <b>VocabularyElement</b> is NOT populated or there is NO match between party identifiers in destination and VocabularyElement   <b>@id</b></li> </ol> <div> <p> If ship-to party the same as sold-to party, ship-to identifier does not need to be included.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> </div> |
|              |  |  |  |  | @type                       | 1...*<br>0/*  | String | <p><b>Conditionally required.</b> Identifies type of destination party identifier, i.e. owning (sold-to) or location (ship-to) party. Valid values:<sup>2</sup></p> <ul style="list-style-type: none"> <li>Sold-to party = <code>urn:epcglobal:cbv:sdt:owning_party</code>.</li> <li>Ship-to party = <code>urn:epcglobal:cbv:sdt:location</code> (only include if identifier different from owning_party).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | tl:locationId               | 0...1<br>0/*  | String | Location. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | @type                       | 0...1<br>0/*  | String | Attribute identifies the location types. See the <a href="#">LocationIdType</a> enumeration list for valid values: <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  | tl:receivingEventExtensions | 0...1<br>-    | -      | Extensions used for Receiving Event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:transactionDate          | 1...1<br>-    | Date   | <b>Required.</b> Date associated with the business transaction document in <b>bizTransactionList</b> in YYYY-MM-DD format. This date may or may not be the same as the <b>eventTime</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>urn:epc:id:sgln:033333.101365.0<sup>2</sup>urn:epcglobal:cbv:sdt:owning\_party<sup>3</sup>urn:epc:id:sgln:0614141.12345.1400<sup>4</sup>GLN<sup>5</sup>2013-09-30

| Data Element |  |  |  |                            | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|----------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:shipToCountryCode       | 1...1<br>2/2  | String | <b>Required.</b> 2 or 3 letter ISO country code for ship to country. This value will be referenced to advise regulatory reporting if it is mandatory for the specified country market. <sup>1</sup><br>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in TraceLink.                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:shipFromCountryCode     | 0...1<br>2/2  | String | 2 or 3 letter ISO country code for ship from country. This value will be referenced to advise regulatory reporting if it is mandatory for the specified country market. <sup>2</sup><br>Setting this value alone does not trigger regulatory reporting. Actual triggering of regulatory reporting is governed by customer administrative configuration in TraceLink.                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | tl:receiptDistributionType | 1...1<br>1/*  | String | <b>Required.</b> Informs what types of regulatory reporting may be triggered based on the nature of the transaction: a purchase, transfer, or return within the same country or from another country. Valid values: <sup>3</sup> <ul style="list-style-type: none"> <li><b>INCOUNTRYPURCHASE</b>: Purchase made within the same country.</li> <li><b>IMPORTPURCHASE</b>: Purchase made into one country from another.</li> <li><b>INCOUNTRYTRANSFER</b>: Transfer made within the same country.</li> <li><b>IMPORTTRANSFER</b>: Transfer made into one country from another.</li> <li><b>INCOUNTRYRETURN</b>: Return made within the same country.</li> <li><b>IMPORTRETURN</b>: Return made into one country from another.</li> </ul> |
|              |  |  |  | tl:supplyType              | 0...1<br>0/*  | String | <b>Conditionally required</b> depending on the country. Identifies the type of supply that is being performed using a valid value from the enumerations list.<br><br><div>  Country Requirements:<br/> Mandatory if <b>cmn:ShipFromCountryCode</b> = <b>KR</b> and <b>cmn:ReceiptDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b>; All values except for Collection apply. </div><br>See the <a href="#">SupplyType</a> enumeration list for valid values.                                                                                                                                                                             |
|              |  |  |  | tl:contractType            | 0...1<br>0/*  | String | <b>Conditionally required</b> if <b>cmn:ShipFromCountryCode</b> = <b>KR</b> and <b>cmn:ReceiptDistributionType</b> = <b>EXPORTSALE</b> or <b>EXPORTRETURN</b> . Identifies the type of contract for the sale of goods using a valid value from the enumerations list. See the <a href="#">ContractType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | tl:comments                | 0...1<br>0/*  | String | Optional remarks or comments associated with delivery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>US<sup>2</sup>US<sup>3</sup>INCOUNTRYSALE

| Data Element |  |  |  |                            | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|----------------------------|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:contractNumber          | 0...1<br>0/*   | String | Identification number of the contract. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:fundingSource           | 0...1<br>0/*   | String | <b>Required.</b> Source of the funding. <sup>2</sup><br>See the <a href="#">FundingSource</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | tl:transferWithoutShipment | 0...1<br>0/*   | String | Indicates that the serial numbers are already in an <b>Available</b> state because there is no associated shipment event. Valid values: <ul style="list-style-type: none"> <li><b>true</b> – Serial numbers are in the <b>Available</b> state.</li> <li><b>false</b> – (default) Serial numbers are in the <b>Pending Receipt</b> state.</li> </ul> Only use when <b>tl:receiptDistributionType</b> = <b>INCOUNTRYTRANSFER</b> or <b>IMPORTTRANSFER</b> . |
|              |  |  |  | tl:entryPort               | 0...1<br>0/*   | String | Name of the shipment's port of entry into a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:exitPort                | 0...1<br>0/*   | String | Name of the shipment's port of exit from a country (e.g. an airport, maritime port, border checkpoint).                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | tl:deliveryInspection      | 0...1<br>0/*   | String | The inspection status of the physical delivery against the delivery documentation.<br>See the <a href="#">DeliveryInspection</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:deliveryInspectionDate  | 0...1<br>10/10 | Date   | The date of the physical delivery inspection against the delivery documentation in YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | tl:deliveryInspectionNote  | 0...1<br>0/*   | String | Comments about the physical delivery inspection against the delivery documentation.                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | tl:removalFromCirculation  | 0...1<br>0/*   | String | Reason the product in the delivery is taken out of the supply chain.<br>See the <a href="#">RemovalFromCirculation</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:aggregationInspection   | 0...1<br>0/*   | String | The inspection status of the aggregation hierarchy of the container.<br>See the <a href="#">AggregationInspection</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:epcOrderItemDetails     | 0...1<br>-     | -      | Group header with specific link between the aggregation event epc and <b>@orderItemNumber</b> .                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>1234567<sup>2</sup>FederalBudgetFunds<sup>3</sup>2021-12-21

| Data Element |  |  |  |  |                         | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|--|-------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:epcOrderItemList     | 1...*<br>-    | -      | <b>Required.</b> Subgroup header.                                                                                                                                                                                                                                                                     |
|              |  |  |  |  | @orderItemNumber        | 0...1<br>0/*  | String | Order item number attribute associating specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> .                                                                                                                                          |
|              |  |  |  |  | tl:epcOrderItem         | 1...*<br>1/*  | String | <b>Required.</b> Serial numbers associated with the pricing and tax information in the current instance of <b>tl:orderItem</b> .                                                                                                                                                                      |
|              |  |  |  |  | tl:orderItemList        | 0...1<br>-    | -      | Order item list group is populated to communicate the pick quantities for each item code at the EACH (unit) level.                                                                                                                                                                                    |
|              |  |  |  |  | tl:orderItem            | 1...*<br>-    | -      | <b>Required.</b> Order item group is a repeating element that captures the item code, lot number and quantity for each item in the order. Each unique item code and lot number are communicated in a separate order item group.                                                                       |
|              |  |  |  |  | tl:orderItemNumber      | 0...1<br>0/*  | String | Associates the specific serial numbers with the price, VAT, and cost taxes reported in a specific instance of <b>tl:orderItem</b> , in EPC Pure Identity URI format.                                                                                                                                  |
|              |  |  |  |  | choice%1                | -<br>-        | -      | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> . Populate only one of <b>tl:InternalMaterialCode</b> , <b>tl:PackagingItemCode</b> , or <b>tl:countryDrugCode</b> . One of the three options must be present.                                                             |
|              |  |  |  |  | tl:internalMaterialCode | 0...1<br>1/*  | String | <b>Conditionally required</b> if neither <b>tl:packagingItemCode</b> nor <b>tl:countryDrugCode</b> is populated. Option 1 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the internal material number configured in Product Master Data. <sup>1</sup>                    |
|              |  |  |  |  | tl:packagingItemCode    | 0...1<br>0/*  | String | <b>Conditionally required</b> if neither <b>tl:internalMaterialCode</b> nor <b>tl:countryDrugCode</b> is populated. Option 2 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data. <sup>2</sup> |
|              |  |  |  |  | @type                   | 0...1<br>0/*  | String | <b>Required.</b> The product code type for the packaging item code using the supported enumeration values (e.g. GTIN-14). See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                         |
|              |  |  |  |  | tl:countryDrugCode      | 0...1<br>0/*  | String | <b>Conditionally required</b> if neither <b>tl:internalMaterialCode</b> nor <b>tl:packagingItemCode</b> is populated. Option 3 for <b>choice%1</b> in <b>OrderItem</b> . Use to identify the product using the country drug code configured in Product Master Data. <sup>3</sup>                      |
|              |  |  |  |  | @type                   | 0...1<br>0/*  | String | <b>Required.</b> The national drug code type using the supported enumeration values (e.g. US_NDC442). See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                      |
|              |  |  |  |  | cbvmdata:lotNumber      | 0...1         | String | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> and <b>IsSerialized</b> = <b>false</b> . The lot or batch code for the items to be                                                                                                                                         |

<sup>1</sup>100234<sup>2</sup>00882025030223<sup>3</sup>0069-4220-66



| Data Element |  |  |  |  |  |                            | Occurs Length | Type    | Description                                                                                                                                                                                                                         |
|--------------|--|--|--|--|--|----------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                            |               |         | 1                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | cbvm:da:itemExpirationDate | 0...1<br>1/*  | Date    | The expiration date for the serialized item, in YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                     |
|              |  |  |  |  |  | tl:quantity                | 1...1<br>-    | Int     | <b>Conditionally required</b> if <b>tl:shipFromCountryCode</b> = <b>KR</b> and <b>IsSerialized</b> = <b>false</b> . The quantity of items at the EACH (unit) level of the item code and lot if specified to be picked. <sup>3</sup> |
|              |  |  |  |  |  | tl:unitPrice               | 0...1<br>0/*  | Decimal | <b>Required.</b> Unit price of item. <sup>4</sup>                                                                                                                                                                                   |
|              |  |  |  |  |  | @currencyCode              | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>5</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                               |
|              |  |  |  |  |  | tl:vat                     | 0...1<br>-    | Decimal | Value Added Tax per unit. <sup>6</sup>                                                                                                                                                                                              |
|              |  |  |  |  |  | @currencyCode              | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>7</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                               |
|              |  |  |  |  |  | tl:grossPrice              | 0...1<br>-    | Decimal | Gross price including unit price and all taxes and fees. <sup>8</sup>                                                                                                                                                               |
|              |  |  |  |  |  | @currencyCode              | 1...1<br>3/3  | String  | <b>Required.</b> Currency ISO code using ISO 4217-2015 format. <sup>9</sup><br>See the <a href="#">ISOCurrency</a> enumeration list for valid values.                                                                               |
|              |  |  |  |  |  | tl:isSerialized            | 0...1<br>0/*  | Boolean | Indicates if item is not serialized. If omitted, defaults value to <b>true</b> . <sup>10</sup>                                                                                                                                      |
|              |  |  |  |  |  | tl:transactionIdentifier   | 0...*         | String  | Transaction identifier at the line-item level of shipment. More than one transaction identifier may be present. <sup>11</sup>                                                                                                       |

<sup>1</sup>A12345<sup>2</sup>2017-12-31<sup>3</sup>50<sup>4</sup>35.67<sup>5</sup>USD<sup>6</sup>152.22<sup>7</sup>USD<sup>8</sup>USD<sup>9</sup>USD<sup>10</sup>true<sup>11</sup>PO303005

| Data Element |  |  |  |                           |  |       |  | Occurs Length                                                                                                    | Type    | Description                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|---------------------------|--|-------|--|------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                           |  | @type |  | 1...1<br>1/*                                                                                                     | String  | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li>• <b>DESTRUCTION</b></li> <li>• <b>INVOICE</b></li> <li>• <b>NOTAFISCAL</b></li> <li>• <b>OTHER</b></li> <li>• <b>PO</b></li> <li>• <b>RETURN</b></li> </ul>                                                                |
|              |  |  |  |                           |  | @date |  | 0...1<br>0/*                                                                                                     | Date    | <b>Required.</b> The transaction identifier date. <sup>1</sup>                                                                                                                                                                                                                                                                        |
|              |  |  |  | tl:warehouseOperatorName  |  |       |  | 0...1<br>0/*                                                                                                     | String  | Name of the person responsible for warehouse operations. <sup>2</sup>                                                                                                                                                                                                                                                                 |
|              |  |  |  | tl:correctiveReceipt      |  |       |  | (missing or bad snippet)0...1(missing or bad snippet)<br>(missing or bad snippet)0/*<br>(missing or bad snippet) | Boolean | Indicates that a new Serialized Operations Manager receipt is correcting a previously voided Serialized Operations Manager receipt. Valid values: <ul style="list-style-type: none"> <li>• <b>false</b> – (default) The receipt is not a corrective receipt.</li> <li>• <b>true</b> – The receipt is a corrective receipt.</li> </ul> |
|              |  |  |  | tl:originalDeliveryNumber |  |       |  | (missing or bad snippet)0...1(missing or bad snippet)                                                            | String  | Original delivery number. Records the original delivery number that is replaced when a receipt is voided and corrections are made to that receipt.                                                                                                                                                                                    |

<sup>1</sup>2019-03-30<sup>2</sup>John Smith

| Data Element |  |  |  |  | Occurs Length                                           | Type | Description |
|--------------|--|--|--|--|---------------------------------------------------------|------|-------------|
|              |  |  |  |  | (missing or bad snippet)0/*<br>(missing or bad snippet) |      |             |

## Example

```
<?xml version="1.0" encoding="UTF-8"?><epcis:EPCISDocument xmlns:cbvmda="urn:epcglobal:cbv:mda"
xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:gslushc="http://epcis.gslus.org/hc/ns"
xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader" schemaVersion="1.2"
creationDate="2017-08-31T17:45:20.0Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">8779891013658</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8887771013655</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>2019082106310032</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-07-25T15:39:53Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
    <extension>
      <EPCISMasterData>
        <VocabularyList>
          <Vocabulary type="urn:epcglobal:epcis:vtype:EPCClass">
            <VocabularyElementList>
```

```

        <VocabularyElement id="urn:epc:idpat:sgtin:068202.0401034.11220207024596">
            <attribute id="http://epcis.tracelink.com/mda/packageTypeCode">CS</attribute>
            <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">133661</attribute>
            <attribute
id="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">MANUFACTURER_PART_NUMBER</attribute>
        </VocabularyElement>
    </VocabularyElementList>
</Vocabulary>
<Vocabulary type="urn:epcglobal:epcis:vtype:Location">
    <VocabularyElementList>
        <VocabularyElement id="urn:epc:id:sgln:9997777.01994.0">
            <attribute id="urn:epcglobal:cbv:mda#name">Clara Manufacturing</attribute>
            <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">712333444</attribute>
            <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
            <attribute
id="http://epcis.tracelink.com/mda/partyRoleCode">MANUFACTURER</attribute>
            <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">10 Welsh St</attribute>
            <attribute id="urn:epcglobal:cbv:mda#city">Malden</attribute>
            <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
            <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
            <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
            <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
            <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
            <attribute id="urn:epcglobal:cbv:mda#state">MA</attribute>
            <attribute id="urn:epcglobal:cbv:mda#postalCode">02148</attribute>
            <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
            <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
            <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
        </VocabularyElement>
        <VocabularyElement id="urn:epc:id:sgln:8887777.01384.0">
            <attribute id="urn:epcglobal:cbv:mda#name">Watson Wholesaler</attribute>
            <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifier">512333444</attribute>
            <attribute
id="http://epcis.tracelink.com/mda/additionalIdentifierType">DEA</attribute>
            <attribute

```

```

id="http://epcis.tracelink.com/mda/businessClassification">WHOLESALE</attribute>
    <attribute id="urn:epcglobal:cbv:mda#streetAddressOne">555 Neelan Road</attribute>
    <attribute id="urn:epcglobal:cbv:mda#city">Sacramento</attribute>
    <attribute id="http://epcis.tracelink.com/mda/district"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/village"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/houseNumber"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/township"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/corporateFax"></attribute>
    <attribute id="urn:epcglobal:cbv:mda#state">CA</attribute>
    <attribute id="urn:epcglobal:cbv:mda#postalCode">95833</attribute>
    <attribute id="urn:epcglobal:cbv:mda#countryCode">US</attribute>
    <attribute id="http://epcis.tracelink.com/mda/premisesCode"></attribute>
    <attribute id="http://epcis.tracelink.com/mda/taxRegistrationCode"></attribute>
  </VocabularyElement>
</VocabularyElementList>
</Vocabulary>
</VocabularyList>
</EPCISMasterData>
</extension>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <ObjectEvent>
      <eventTime>2019-09-25T00:12:23.8307Z</eventTime>
      <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
      <epcList>
        <epc>urn:epc:id:sscc:005434.40000000020</epc>
      </epcList>
      <action>ADD</action>
      <bizStep>urn:epcglobal:cbv:bizstep:commissioning</bizStep>
      <disposition>urn:epcglobal:cbv:disp:active</disposition>
      <bizLocation>
        <id>urn:epc:id:sgln:8887777.01384.0</id>
      </bizLocation>
      <extension>
        <ilmd>
          <cbvmda:lotNumber>5998</cbvmda:lotNumber>
          <cbvmda:itemExpirationDate>2029-07-25</cbvmda:itemExpirationDate>
          <tl:commissionEventExtensions>

```

```

        <tl:packagingItemCode type="GTIN-14">00992326050107</tl:packagingItemCode>
        <tl:manufacturingDate>2019-07-25</tl:manufacturingDate>
    </tl:commissionEventExtensions>
</ilmd>
</extension>
</ObjectEvent>
<AggregationEvent>
    <eventTime>2019-09-25T00:12:23.8Z</eventTime>
    <eventTimeZoneOffset>-04:00</eventTimeZoneOffset>
    <parentID>urn:epc:id:sscc:005434.40000000021</parentID>
    <childEPCs>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024596</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024597</epc>
    </childEPCs>
    <action>ADD</action>
    <bizStep>urn:epcglobal:cbv:bizstep:packing</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <bizLocation>
        <id>urn:epc:id:sgln:8887777.01384.0</id>
    </bizLocation>
</AggregationEvent>
<!-- Receiving -->
<ObjectEvent>
    <eventTime>2019-09-25T00:12:23.8Z</eventTime>
    <eventTimeZoneOffset/>
    <epcList>
        <epc>urn:epc:id:sscc:005434.40000000020</epc>
    </epcList>
    <action>OBSERVE</action>
    <bizStep>urn:epcglobal:cbv:bizstep:receiving</bizStep>
    <disposition>urn:epcglobal:cbv:disp:in_progress</disposition>
    <readPoint>
        <id>urn:epc:id:sgln:8887777.01384.0</id>
    </readPoint>
    <bizTransactionList>
        <bizTransaction type="urn:epcglobal:cbv:btt:po" date="2019-09-
25">urn:epcglobal:cbv:bt:0614141000029:4747880013</bizTransaction>
        <bizTransaction type="urn:epcglobal:cbv:btt:inv" date="2019-09-
25">urn:epcglobal:cbv:bt:7774141000029:987654321</bizTransaction>

```

```

        <bizTransaction type="urn:epcglobal:cbv:btt:desadv" date="2019-09-
25">urn:epcglobal:cbv:bt:7774141000029:987654321</bizTransaction>
    </bizTransactionList>
    <extension>
        <sourceList>
            <source type="urn:epcglobal:cbv:sdt:owning_party">urn:epc:id:sgln:9997777.01994.0</source>
        </sourceList>
        <destinationList>
            <destination type="urn:epcglobal:cbv:sdt:owning_
party">urn:epc:id:sgln:9297187.01994.0</destination>
        </destinationList>
    </extension>
    <tl:receivingEventExtensions>
        <tl:transactionDate>2019-07-25</tl:transactionDate>
        <tl:shipToCountryCode>US</tl:shipToCountryCode>
        <tl:receiptDistributionType>INCOUNTRYTRANSFER</tl:receiptDistributionType>
        <tl:supplyType>MedicalCareDistribution</tl:supplyType>
        <tl:contractType>PrivateContract</tl:contractType>
        <tl:contractNubmer>C102</tl:contractNubmer>
        <tl:fundingSource>OwnFunds</tl:fundingSource>
        <tl:transferWithoutShipment>false</tl:transferWithoutShipment>
        <tl:entryPort></tl:entryPort>
        <tl:exitPort></tl:exitPort>
        <tl:epcOrderItemDetails>
            <tl:epcOrderItemList orderItemNumber="15">
                <tl:epcOrderItem>urn:epc:id:sscc:005434.40000000021</tl:epcOrderItem>
            </tl:epcOrderItemList>
        </tl:epcOrderItemDetails>
        <tl:orderItemList>
            <tl:orderItem>
                <tl:orderItemNumber>15</tl:orderItemNumber>
                <tl:packagingItemCode type="GTIN-14">00992326050107</tl:packagingItemCode>
                <cbvmدا:lotNumber>L120012</cbvmدا:lotNumber>
                <cbvmدا:itemExpirationDate>2029-07-25</cbvmدا:itemExpirationDate>
                <tl:quantity>5</tl:quantity>
                <tl:unitPrice currencyCode="USD">89.55</tl:unitPrice>
                <tl:vat currencyCode="USD">10.45</tl:vat>
                <tl:grossPrice currencyCode="USD">100.00</tl:grossPrice>
                <tl:isSerialized>true</tl:isSerialized>
            </tl:orderItem>
        </tl:orderItemList>
    </tl:receivingEventExtensions>
</bizTransaction>

```

```

        <tl:transactionIdentifier type="PO" date="2019-03-30">TI007</tl:transactionIdentifier>
      </tl:orderItem>
    </tl:orderItemList>
    <tl:warehouseOperatorName>Patrick Murphy</tl:warehouseOperatorName>
    <tl:correctiveReceipt>true</tl:correctiveReceipt>
    <tl:originalDeliveryNumber>1234567</tl:originalDeliveryNumber>
  </tl:receivingEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                               | Error Message                                                                           | Description                                                                                                                      |
|--------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                             |                                                                                         |                                                                                                                                  |
| AggregationEvent   <b>action</b>           | Action ADD is required for is required for the AggregationEvent !!!                     | The error occurs if bizStep = "urn:epcglobal:cbv:bizstep:packing", but the source does not equal "ADD" for an aggregation event. |
| AggregationEvent   bizLocation   <b>id</b> | Event location in the aggregation event is required !!!                                 | The error occurs if the source is empty or null.                                                                                 |
| AggregationEvent   <b>bizStep</b>          | bizStep urn:epcglobal:cbv:bizstep:packing is required for the AggregationEvent !!!      | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:packing" for an aggregation event.                      |
| AggregationEvent   childEPCs   <b>epc</b>  | Invalid EPC format !!!                                                                  | The error occurs if the source could not be translated.                                                                          |
| AggregationEvent   <b>disposition</b>      | Disposition urn:epcglobal:cbv:disp:in_progress is required for the AggregationEvent !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress" for an aggregation event.                     |
| AggregationEvent   <b>parentID</b>         | Invalid EPC format !!!                                                                  | The error occurs if the source is empty or null.                                                                                 |
| bizTransaction   <b>@type</b>              | Valid bizTransaction type is required if bizTransaction is populated !!!                | The error occurs if bizTransaction is populated, but the source is empty or null.                                                |
| attribute(1)                               | Ship to business party name is required !!!                                             | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                    |
|                                            | Ship from business party name is required !!!                                           | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                    |
|                                            | Carrier business party name is required !!!                                             | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                    |



| Data Element | Error Message                                                                   | Description                                                                                                                   |
|--------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
|              | Sold to business party name is required !!!                                     | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                 |
|              | Sold from business party name is required !!!                                   | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                 |
|              | Valid packagingLevel code required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| attribute(2) | Party type is required if additional facility identifier is populated !!!       | The error occurs if attribute   @id = "http://epcis.tracelink.com/mda/additionalIdentifier", but the source is empty or null. |
|              | Party type is required if additional business party identifier is populated !!! | The error occurs if attribute   @id = "http://epcis.tracelink.com/mda/additionalIdentifier", but the source is empty or null. |
|              | Party type is required if additional business party identifier is populated !!! | The error occurs if attribute   @id = "http://epcis.tracelink.com/mda/additionalIdentifier", but the source is empty or null. |
|              | Party type is required if additional facility identifier is populated !!!       | The error occurs if attribute   @id = "http://epcis.tracelink.com/mda/additionalIdentifier", but the source is empty or null. |
| attribute(3) | Valid carrier business party identifier type is required !!!                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
|              | Valid sold to business party identifier type is required !!!                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
|              | Valid ship to location identifier type is required !!!                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
|              | Valid sold from business party identifier type is required !!!                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| attribute(4) | Valid business classification code is required !!!                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
|              | Valid business classification code is required !!!                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                 |
| attribute(5) | Carrier business party street address is required !!!                           | The error occurs if VocabularyElement   <b>attribute</b> fields are present,                                                  |

| Data Element  | Error Message                                            | Description                                                                                                   |
|---------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|               |                                                          | but the source is empty or null.                                                                              |
|               | Sold from business party street address is required !!!  | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Sold to business party street address is required !!!    | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Ship from location street address is required !!!        | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Ship to location street address is required !!!          | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
| attribute(8)  | Ship to location city is required !!!                    | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Sold from business party city is required !!!            | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Carrier business party city is required !!!              | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Ship from location city is required !!!                  | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Sold to business party city is required !!!              | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
| attribute(10) | Sold from business party state or region is required !!! | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Sold to business party state or region is required !!!   | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Ship to location state or region is required !!!         | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Carrier business party state or region is required !!!   | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
|               | Ship from location state or region is required !!!       | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null. |
| attribute(12) | Valid Sold to business party country is required !!!     | The error occurs if the source is present, but there is no matching entry                                     |

| Data Element                         | Error Message                                                                           | Description                                                                                                                                                                                                      |
|--------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      |                                                                                         | in the lookup file.                                                                                                                                                                                              |
|                                      | Valid Carrier business party country is required !!!                                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                    |
|                                      | Carrier business party country is required !!!                                          | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                                                                                                    |
|                                      | Valid Sold from business party country is required !!!                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                    |
|                                      | Valid Ship from location country is required !!!                                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                    |
|                                      | Valid Ship to location country is required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                    |
|                                      | Ship to location country is required !!!                                                | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                                                                                                    |
|                                      | Sold to business party country is required !!!                                          | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                                                                                                    |
|                                      | Ship from location country is required !!!                                              | The error occurs if VocabularyElement   <b>attribute</b> fields are present, but the source is empty or null.                                                                                                    |
|                                      | Sold from business party country is required !!!                                        | The error occurs if VocabularyElement/attribute fields are present, but the source is empty or null.                                                                                                             |
| cbvmdata:itemExpirationDate          | Expiration date is required !!!                                                         | The error occurs if the serial number type is China, GTIN, or NTIN, but the source is empty or null.                                                                                                             |
| cbvmdata:lotNumber                   | Lot number is required !!!                                                              | The error occurs if the serial number type is China, GTIN, or NTIN, but the source is empty or null.                                                                                                             |
| choice%1                             | One of internalMaterialCode or packagingItemCode or countryDrugCode is required !!!     | The error occurs if tl:internalMaterialCode, tl:packagingItemCode, and tl:countryDrugCode are empty or null.                                                                                                     |
| destinationList   <b>destination</b> | Valid sold-to business lookup identifier type is required !!!                           | The error occurs if the source is empty or null.                                                                                                                                                                 |
|                                      | Ship-to party identifier must match an identifier in VocabularyElement   <b>@id</b> !!! | The error occurs if no match is found between destinationList   <b>destination</b> and VocabularyElement   <b>@id</b> in the party master data header when party master address data is populated in the header. |
| destinationList   <b>destination</b> | Valid ship-to business lookup identifier type is required !!!                           | The error occurs if the source is empty or null.                                                                                                                                                                 |

| Data Element                                                | Error Message                                                                                 | Description                                                                                                                             |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| EPCISMasterData                                             | Party master data is required in receiving message !!!                                        | The error occurs if VocabularyList in the source is empty or null.                                                                      |
| ObjectEvent (Commissioning Events)   <b>action</b>          | Action ADD is required for ObjectEvent commissioning !!!                                      | The error occurs if bizStep = "urn:epcglobal:cbv:bizstep:commissioning", but the source does not equal "ADD" for a commissioning event. |
| ObjectEvent (Commissioning Event)   bizLocation   <b>id</b> | Event location in the commissioning event is required !!!                                     | The error occurs if the source is empty or null.                                                                                        |
| ObjectEvent (Commissioning Events)   <b>bizStep</b>         | bizStep urn:epcglobal:cbv:bizstep:commissioning is required for ObjectEvent commissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:commissioning" for a commissioning event.                      |
| ObjectEvent (Commissioning Events)   <b>disposition</b>     | Disposition urn:epcglobal:cbv:disp:active is required for ObjectEvent commissioning !!!       | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:active" for a commissioning event.                                |
| ObjectEvent (Commissioning Events)   epclist   <b>epc</b>   | Invalid EPC format !!!                                                                        | The error occurs if the source is empty or null.                                                                                        |
| ObjectEvent (Receiving Events)                              | Receiving event data is required !!!                                                          | The error occurs if receiving event is not present in source.                                                                           |
|                                                             | Only one receiving event is required !!!                                                      | The error occurs if more than one receiving event is present.                                                                           |
| ObjectEvent (Receiving Events)   <b>action</b>              | Action OBSERVE is required for ObjectEvent receiving !!!                                      | The error occurs if bizStep = "urn:epcglobal:cbv:bizstep:in_progress", but the source does not equal "OBSERVE" for a receiving event.   |
| ObjectEvent (Receiving Events)   <b>bizStep</b>             | bizStep urn:epcglobal:cbv:bizstep:receiving is required for ObjectEvent receiving !!!         | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:receiving" for a receiving event.                              |
| ObjectEvent (Receiving Events)   <b>bizTransactionList</b>  | Biz transaction list is required in receiving event !!!                                       | The error occurs if the source is empty or null.                                                                                        |
| ObjectEvent (Receiving Events)   <b>disposition</b>         | Disposition urn:epcglobal:cbv:disp:in_progress is required for ObjectEvent receiving !!!      | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:in_progress" for a receiving event.                               |
| ObjectEvent (Receiving Events)   epclist   <b>epc</b>       | At least one serial number in epclist is required !!!                                         | The error occurs if the source is empty or null.                                                                                        |

| Data Element                                                            | Error Message                                                                     | Description                                                                                                                                                                                            |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ObjectEvent (Receiving Events)   extension   sourceList   <b>source</b> | Valid sold-from business lookup identifier type is required !!!                   | The error occurs if the source is empty or null.                                                                                                                                                       |
|                                                                         | Valid ship-from business lookup identifier type is required !!!                   | The error occurs if the source is empty or null.                                                                                                                                                       |
|                                                                         | Ship-from party identifier must match an identifier in VocabularyElement[@id] !!! | The error occurs if no match is found between sourceList   <b>source</b> and VocabularyElement   <b>@id</b> in the party master data header when party master address data is populated in the header. |
|                                                                         | Carrier party identifier must match an identifier in VocabularyElement[@id] !!!   | The error occurs if no match is found between sourceList   <b>source</b> and VocabularyElement   <b>@id</b> in the party master data header when party master address data is populated in the header. |
|                                                                         | Valid carrier business lookup identifier type is required !!!                     | The error occurs if the source is empty or null.                                                                                                                                                       |
| ObjectEvent (Receiving Events)   readPoint   <b>id</b>                  | Event location in the receiving event is required !!!                             | The error occurs if the source is empty or null.                                                                                                                                                       |
| sbdh:Receiver   sbdh:Identifier   <b>@Authority</b>                     | Valid Receiver/Identifier Authority is required !!!                               | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                          |
| sbdh:Sender   sbdh:Identifier   <b>@Authority</b>                       | Valid Sender/Identifier Authority is required !!!                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                          |
| tl:countryDrugCode   <b>@type</b>                                       | Country drug code type is required if country drug code is populated !!!          | The error occurs if countryDrugCode is populated but the source is empty or null, or is not a valid value from the enumeration list.                                                                   |
| tl:countryMarket                                                        | Valid ISO country code is required !!!                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                          |
| tl:fieldName                                                            | Field name is required if ExtensionField group present in source !!!              | The error occurs if ExtensionField group is populated, but the source is empty or null.                                                                                                                |
| tl:fieldValue                                                           | Field value is required if ExtensionField group present in source !!!             | The error occurs if ExtensionField group is populated, but the source is empty or null.                                                                                                                |
| tl:packagingLevel                                                       | Packaging Level is required !!!                                                   | The error occurs if the serial number type is China, GTIN, or NTIN, but the source is empty or null.                                                                                                   |
| tl:packagingItemCode   <b>@type</b>                                     | Packaging item code type is required !!!                                          | The error occurs if packagingItemCode is populated but the source is empty or null, or is not a valid value from the enumeration list.                                                                 |
|                                                                         | Packaging item code type required if packagingItemCode is populated !!!           | The error occurs if packagingItemCode is populated but the source is empty or null, or is not a valid value from the enumeration list.                                                                 |
| tl:quantity                                                             | Quantity value greater than 0 is required !!!                                     | The error occurs if the source = "0", OrderItemList is present and the source is less than 0, or the source is empty or null.                                                                          |

| Data Element                 | Error Message                                                                      | Description                                                                                                                    |
|------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| tl:receiptDistributionType   | Valid receipt distributionType is required !!!                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                            |
| tl:receivingEventExtensions  | receivingEventExtensions required if receiving event populated !!!                 | The error occurs if receiving event is populated, but the source is empty or null.                                             |
| tl:shipFromCountryCode       | Valid ISO country code is required !!!                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.                                  |
| tl:shipToCountryCode         | Valid ISO country code for ship-to country is required !!!                         | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                            |
| tl:supplyType                | Valid Supply Type is required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                  |
| tl:transactionDate           | Transaction date is required !!!                                                   | The error occurs if the source is empty or null.                                                                               |
| tl:unitPrice   @currencyCode | Valid ISO currency code is required !!!                                            | The error occurs if unitPrice is populated but the source is empty or null, or is not a valid value from the enumeration list. |
| VocabularyElement            | Ship to party info required in VocabularyElement if present in sourceList !!!      | The error occurs if ship to is present in sourceList, but not in VocabularyElement.                                            |
|                              | Ship to party info required in VocabularyElement if present in destinationList !!! | The error occurs if ship to is present in destinationList, but not in VocabularyElement.                                       |
|                              | Sold to party identifier is required !!!                                           | The error occurs if the source is empty or null.                                                                               |
|                              | Sold from party identifier is required !!!                                         | The error occurs if the source is empty or null.                                                                               |
|                              | Ship from party info required in VocabularyElement if present in sourceList !!!    | The error occurs if ship from party is present in sourceList, but not in VocabularyElement.                                    |
|                              | Carrier party info required in VocabularyElement if present in sourceList !!!      | The error occurs if carrier party is present in sourceList, but not in VocabularyElement.                                      |
| VocabularyElement   @id      | Valid carrier business party lookup identifier type is required !!!                | The error occurs if the source is present, but there is no matching entry in the lookup file.                                  |
| VocabularyElement   @id      | Valid ship to location identifier type is required !!!                             | The error occurs if the source is present, but there is no matching entry in the lookup file.                                  |
| VocabularyElement   @id      | Valid ship to location lookup identifier type is required !!!                      | The error occurs if the source is present, but there is no matching entry in the lookup file.                                  |

| Data Element                          | Error Message                                                                                                                                                                                                                                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VocabularyElement   @id               | Valid sold to business party identifier type is required !!!                                                                                                                                                                                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                                                                                                                                                                                                                                                      |
| VocabularyElement   @id               | Item code is required in source VocabularyElement[@id] !!!                                                                                                                                                                                                | The error occurs if the source is empty or null.                                                                                                                                                                                                                                                                                                                                                                                                   |
| VocabularyElement   @id               | SGTIN or NTIN or CN-EDMC in VocabularyElement id is required !!!                                                                                                                                                                                          | The error occurs if the source is not an SGTIN, NTIN, or CN-EDMC and master data is present in the header extension.                                                                                                                                                                                                                                                                                                                               |
| VocabularyElement   @id               | Valid sold to business party lookup identifier type is required !!!                                                                                                                                                                                       | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                                                                                                                                                                                                                                                      |
| VocabularyElement   @id               | Valid ship from business party identifier type is required !!!                                                                                                                                                                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                                                                                                                                                                                                                                                      |
| VocabularyElement   @id               | Valid carrier business party identifier type is required !!!                                                                                                                                                                                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                                                                                                                                                                                                                                                      |
| VocabularyElement   @id               | Valid sold from business party lookup identifier type is required !!!                                                                                                                                                                                     | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                                                                                                                                                                                                                                                      |
| VocabularyElement   @id               | Valid sold from business party identifier type is required !!!                                                                                                                                                                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                                                                                                                                                                                                                                                                                                                      |
| <b>Class 2</b>                        |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| @currencyCode                         | CurrencyCode for shipping event for delivery <DeliveryNumber> not found.                                                                                                                                                                                  | The error occurs if UnitPrice is populated, but the source is empty or null.                                                                                                                                                                                                                                                                                                                                                                       |
| bizTransaction   @date                | Transaction Identifier Date is required if Ship To Country Code = RU.                                                                                                                                                                                     | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                                                                                                                                                                                                                                                                                                                                   |
| destination   destinationList         | SOM Receiving inbound processing could not be completed. The ReceiverInfo with either ToBusinessPartyLookupId or ToBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified. | The error occurs if the source is empty or null and: <ul style="list-style-type: none"> <li>Transfer or sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or sale export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
| destination   destinationList   @type | Could not perform Location Master Data lookup to populate receiver shipping address fields. <ShipToLocationLookupId / type> <ShipToLocationLookupId> is not configured in your Company                                                                    | The error occurs if cmn:ShipToLocationLookupId   @type or cmn:ShipToLocationLookupId is empty or null in Company or Partner Location Master Data.                                                                                                                                                                                                                                                                                                  |

| Data Element                          | Error Message                                                                                                                                                                                                                                                                                                                                                                                         | Description                                                                                                                                                  |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | Location Master Data nor in your Partner Location Master Data. Please configure <ShipToLocationLookupId / type><br><ShipToLocationLookupId> in Company Location Master Data or in Partner Location Master Data (if the ship to location is a partner location) and reprocess the file.                                                                                                                |                                                                                                                                                              |
| destination   destinationList   @type | Could not perform Company Master Data lookup to populate receiver business address fields. <ToBusinessPartyLookupId / type><br><ToBusinessPartyLookupId> is not configured in your Company Master Data. Please configure <ToBusinessPartyLookupId / type><br><ToBusinessPartyLookupId> in Company Master Data, and reprocess the file.                                                                | The error occurs if cmn:ToBusinessPartyLookupId   @type or cmn:ToBusinessPartyLookupId is empty or null in Company or Partner Company Master Data.           |
| epcList   epc                         | Serial Number <ParentSerial> reference in aggregation but not present in ReceivingEvent / NumberList                                                                                                                                                                                                                                                                                                  | The error occurs if the source is not present in ReceivingEvent   <b>NumberList</b> .                                                                        |
| N/A                                   | Serial Number <ParentSerial> reference in aggregation but not present in ReceivingEvent / NumberList                                                                                                                                                                                                                                                                                                  | The error occurs if all top-most parent serial numbers are not present in ReceivingEvent   <b>NumberList</b> elements.                                       |
|                                       | Cannot perform operation on serial number <serial number> with serial number item state <item state>. This operation can only be performed when the serial number is Pending Receipt or Shipped.                                                                                                                                                                                                      | The error occurs if Serial Number was not shipped.                                                                                                           |
|                                       | Could not commission parent serial number <ParentSerial> because it is not an SSCC Number                                                                                                                                                                                                                                                                                                             | The error occurs if ParentSerial is not an SSCC Number.                                                                                                      |
| source   sourceList   @type           | Could not perform Master Data lookup to populate transportation carrier business address fields. <CarrierBusinessPartyLookupId / type> <CarrierBusinessPartyLookupId > is not configured in your Company or Partner Company Master Data. Please configure <CarrierBusinessPartyLookupId / type><br><CarrierBusinessPartyLookupId > in Company or Partner Company Master Data, and reprocess the file. | The error occurs if cmn:CarrierBusinessPartyLookupId   @type or cmn:CarrierBusinessPartyLookupId is empty or null in Company or Partner Company Master Data. |
| source   sourceList   @type           | Could not perform Master Data lookup to populate sender shipping address fields. <ShipFromLocationLookupId / type><br><ShipFromLocationLookupId> is not configured in your Company or Partner Location Master Data. Please configure <ShipFromLocationLookupId / type> <ShipFromLocationLookupId> in Company or Partner Location Master Data, and reprocess the file.                                 | The error occurs if cmn:ShipFromLocationLookupId   @type or cmn:ShipFromLocationLookupId is empty or null in Company or Partner Location Master Data.        |
| source   sourceList   @type           | Could not perform Master Data lookup to populate sender business address fields. <FromBusinessPartyLookupId / type>                                                                                                                                                                                                                                                                                   | The error occurs if cmn:FromBusinessPartyLookupId   @type or cmn:FromBusinessPartyLookupId is empty or null in Company or                                    |



| Data Element           | Error Message                                                                                                                                                                                                                                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <FromBusinessPartyLookupId> is not configured in your Company or Partner Master Data. Please configure <FromBusinessPartyLookupId / type> <FromBusinessPartyLookupId> in Company or Partner Master Data, and reprocess the file.                            | Partner Company Master Data.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| sourceList             | SOM Receiving inbound processing could not be completed. The SenderInfo with either FromBusinessPartyLookupId or FromBusinessPartyInfo for the ShipFromCountryCode of <ShipFromCountryCode> and ShipToCountryCode of <ShipToCountryCode> must be specified. | The error occurs if the source is empty or null and: <ul style="list-style-type: none"> <li>Transfer or sale occurs in non-EU FMD markets where the ShipToCountryCode is not an EU FMD country and the ShipFromCountryCode is not an EU FMD country.</li> <li>Transfer or sale export occurs from the EU FMD markets where the ShipToCountryCode is China, US, South Korea, or Russia and the ShipFromCountryCode is an EU FMD country.</li> </ul> |
| tl:contractType        | ContractType for receiving event for delivery <DeliveryNumber> not found.                                                                                                                                                                                   | The error occurs if ShipToCountryCode = "KR" and ReceiptDistributionType = "InCountryReturn", but the source is empty or null.                                                                                                                                                                                                                                                                                                                     |
| tl:contractType        | ContractType for receiving event for delivery <DeliveryNumber> not found.                                                                                                                                                                                   | The error occurs if ShipToCountryCode = "KR", but the source does not equal either "PrivateContract" or "CompetitiveBid".                                                                                                                                                                                                                                                                                                                          |
| tl:fundingSource       | Funding Source is required if Ship To Country Code is RU and Ship From Country Code is RU.                                                                                                                                                                  | The error occurs if both tl:shipToCountryCode and tl:shipFromCountryCode = "RU", but the source is empty or null.                                                                                                                                                                                                                                                                                                                                  |
| tl:orderItem           | OrderItemList for shipping event for delivery <DeliveryNumber> not found.                                                                                                                                                                                   | The error occurs if ShipToCountryCode = "KR" and ReceiptDistributionType = "InCountryReturn", but the source is empty or null.                                                                                                                                                                                                                                                                                                                     |
| tl:orderItem           | OrderItems for receiving event for delivery <DeliveryNumber> not found.                                                                                                                                                                                     | The error occurs if ShipToCountryCode = "KR" and ReceiptDistributionType = "InCountryReturn", but the source is empty or null.                                                                                                                                                                                                                                                                                                                     |
| tl:shipFromCountryCode | SOM Receiving inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified.                                                                      | The error occurs if the sourceList and destinationList are both omitted, and tl:shipToCountryCode and tl:ShipFromCountrycode are empty or null.                                                                                                                                                                                                                                                                                                    |
| tl:shipToCountryCode   | SOM Receiving inbound processing could not be completed. Both the ShipToCountryCode and ShipFromCountryCode must be specified when the Sender Info and ReceiverInfo are not specified.                                                                      | The error occurs if the sourceList and destinationList are both omitted, and tl:shipToCountryCode and tl:ShipFromCountrycode are empty or null.                                                                                                                                                                                                                                                                                                    |
| tl:supplyType          | SupplyType for receiving event for delivery <DeliveryNumber> not found.                                                                                                                                                                                     | The error occurs if ShipToCountryCode = "KR" and ReceiptDistributionType = "InCountryReturn", but the source is empty or null.                                                                                                                                                                                                                                                                                                                     |

| Data Element                                                                                                                                                      | Error Message                                                                                                 | Description                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| tl:transactionIdentifier   @date                                                                                                                                  | Order Item Transaction Identifier Date is required if Ship To Country Code = RU.                              | The error occurs if tl:shipToCountryCode = "RU" but the source is empty or null.                                                               |
| tl:unitPrice                                                                                                                                                      | UnitPrice is for receiving event for delivery <DeliveryNumber> not found.                                     | The error occurs if ShipToCountryCode = "KR" and ReceiptDistributionType = "InCountryReturn", but the source is empty or null.                 |
| tl:unitPrice                                                                                                                                                      | Unit Price is required if Ship To Country Code is RU and Ship From Country Code is any of RU, AM, BY, KZ, KG. | The error occurs if tl:shipToCountryCode = "RU" and tl:shipFromCountryCode = "AM", "BY", "KG", "KZ", or "RU", but the source is empty or null. |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                               |                                                                                                                                                |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                               |                                                                                                                                                |





# Market release





# Market release APIs

## Why do I use these messages?

Use the following messages to set the status for a full or partial lot to Market Released to indicate that the items are ready for circulation in Russian market.

## Which report do these messages generate?

These messages generate the [342 - Release in Circulation](#) report in the Russia Compliance application if their contents meet the report conditions.

# Market Release (XML)

## Guidelines

**Message Type:** SOM\_MARKET\_RELEASE

**Info Exchange Display Name:** Market Release

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element                |                       |                      | Occurs Length | Type   | Description                                                                |
|-----------------------------|-----------------------|----------------------|---------------|--------|----------------------------------------------------------------------------|
| som:SOMMarketReleaseMessage |                       |                      | 1...1<br>-    | -      | <b>Required.</b> Root element of message                                   |
|                             | som:ControlFileHeader |                      | 1...1<br>-    | -      | <b>Required.</b> The message document's header information.                |
|                             |                       | cmn:FileSenderNumber | 1...1<br>1/20 | String | <b>Required.</b> The company identifier of the file's sender. <sup>1</sup> |

<sup>1</sup>8888882028655

| Data Element |                 |                          | Occurs Length  | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-----------------|--------------------------|----------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                 | cmn:FileReceiverNumber   | 1...1<br>1/20  | String | <b>Required.</b> The company identifier of the file's recipient. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                         |
|              |                 | cmn:FileControlNumber    | 1...1<br>1/*   | String | <b>Required.</b> The message's unique file control ID number. A file control ID number is mandatory for all messages. <sup>2</sup>                                                                                                                                                                                                                                                                                                    |
|              |                 | cmn:FileDate             | 1...1<br>10/10 | Date   | <b>Required.</b> The date that the message is sent in YYYY-MM-DD format. Date and times must be in GMT. <sup>3</sup>                                                                                                                                                                                                                                                                                                                  |
|              |                 | cmn:FileTime             | 1...1<br>8/8   | Time   | <b>Required.</b> Time file generated in XML in HH:MM:SSZ format. The system expects the <b>Z</b> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>4</sup>                                                                                                                                                                                            |
|              | som:MessageBody |                          | 1...1<br>-     | -      | <b>Required.</b> The message document's header information.                                                                                                                                                                                                                                                                                                                                                                           |
|              |                 | cmn:EventLocation        | 0...1<br>0/*   | String | Business or location identifier for the facility or warehouse scoping the Market Release status update for the serial numbers matching the specified item code and lot number. <sup>5</sup><br>If the location is omitted, the Market Release status update is applied globally to all matching serial numbers in TraceLink.                                                                                                          |
|              |                 | cmn:EventLocationType    | 0...1<br>0/*   | String | <b>Conditionally required</b> if <b>cmn:EventLocation</b> is present. Business or location type for the entity scoping the Market Release status. <sup>6</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                    |
|              |                 | choice%1                 | -<br>-         | Choice | <b>Required.</b> One and only one of the following item code data elements may be present at a time: <ul style="list-style-type: none"> <li>• <b>cmn:InternalMaterialCode</b></li> <li>• <b>cmn:PackagingItemCode</b></li> <li>• <b>cmn:CountryDrugCode</b></li> </ul>                                                                                                                                                                |
|              |                 | cmn:InternalMaterialCode | 0...1<br>0/*   | String | <b>Conditionally required</b> if both <b>cmn:PackagingItemCode</b> and <b>cmn:CountryDrugCode</b> are empty or null. Updates the status of the serialized items with the associated internal material code to Market Release. <sup>7</sup><br>Specifying an internal material code updates all serial numbers at all packaging levels (e.g. item, case) that are linked to the internal material number and the specified lot number. |

<sup>1</sup>8888882028677<sup>2</sup>20190920-LD3<sup>3</sup>2019-09-20<sup>4</sup>04:30:32Z<sup>5</sup>0333331013655<sup>6</sup>GLN<sup>7</sup>100253

| Data Element |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  | cmn:PackagingItemCode     | 0...1<br>0/*  | String | <b>Conditionally required</b> if both <b>cmn:InternalMaterialCode</b> and <b>cmn:CountryDrugCode</b> are empty or null. Updates the status of the serialized items with the associated packaging level item code to Market Release. <sup>1</sup><br>Specifying a packaging item code updates all serial numbers that are linked to only the specified packaging item code and lot number.               |
|              |  | @type                     | 0...1<br>0/*  | String | <b>Required.</b> Packaging item code type. <sup>2</sup><br>See the <a href="#">ItemCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                          |
|              |  | cmn:CountryDrugCode       | 0...1<br>1/*  | String | <b>Conditionally required</b> if both <b>cmn:InternalMaterialCode</b> and <b>cmn:PackagingItemCode</b> are empty or null. Updates the status of the serialized items with the associated national drug code to Market Release. <sup>3</sup><br>Specifying a country drug code updates all serial numbers at all packaging levels that are linked to the country drug code and the specified lot number. |
|              |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b> The country drug code type. <sup>4</sup><br>See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                 |
|              |  | cmn:LotNumber             | 1...1<br>1/*  | String | <b>Required.</b> The lot number associated with <b>cmn:InternalMaterialCode</b> , <b>cmn:PackagingItemCode</b> , or <b>cmn:CountryDrugCode</b> used to identify the serial numbers to be updated. <sup>5</sup>                                                                                                                                                                                          |
|              |  | cmn:NumberList            | 0...1<br>-    | -      | Groups list of serial numbers.                                                                                                                                                                                                                                                                                                                                                                          |
|              |  | cmn:Serial                | 1...*<br>1/*  | String | <b>Required.</b> Serial number expressed in the GS1 Application Identifier format without parentheses for the AI keys. AI(01)(21) formatted serial number for GTINs or AI(00) formatted serial number for SSCCs. Express non-GS1 serial numbers (e.g. CN-EDMC) in native format. <sup>6</sup>                                                                                                           |
|              |  | cmn:TransactionIdentifier | 0...*<br>0/*  | String | The transaction identifier associated with the released product. This may be a certificate or declaration of conformity. <sup>7</sup>                                                                                                                                                                                                                                                                   |
|              |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b> The transaction identifier type for the market release.<br>Valid values: <sup>8</sup> <ul style="list-style-type: none"> <li>CIVILCIRCULATION</li> <li>STATECONFIRMATION</li> </ul>                                                                                                                                                                                                    |

<sup>1</sup>50300694220667<sup>2</sup>GTIN-14<sup>3</sup>123451234009<sup>4</sup>DE\_PPN<sup>5</sup>B234567<sup>6</sup>015088202501033321100000060001<sup>7</sup>9857462156<sup>8</sup>CIVILCIRCULATION

| Data Element |  |                        |                       | Occurs Length | Type     | Description                                                                                                                                                                            |
|--------------|--|------------------------|-----------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |                        | @date                 | 0...1<br>0/*  | Date     | The transaction identifier date attribute. <sup>1</sup>                                                                                                                                |
|              |  | cmn:EventDateTime      |                       | 0...1<br>0/*  | DateTime | Timestamp of the date and time of the product release with the UTC time zone indicator in YYYY-MM-DDThh:mm:ss.ssZ format. <sup>2</sup>                                                 |
|              |  | cmn:MarketCountryCode  |                       | 1...1<br>1/*  | String   | <b>Required.</b> The 2 character ISO code for the market country. <sup>3</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                            |
|              |  | cmn:ProductionQuantity |                       | 0...*<br>-    | -        | Looping production quantity group.                                                                                                                                                     |
|              |  |                        | choice%1              | 1...1         | Choice   | <b>Required.</b> Either <b>cmn:PackagingItemCode</b> or <b>cmn:CompanyPrefix</b> must be present.                                                                                      |
|              |  |                        | cmn:PackagingItemCode | 0...1<br>0/*  | String   | <b>Conditionally required</b> if <b>cmn:CompanyPrefix</b> is empty or null. Identifies the product using the packaging level item code configured in Product Master Data. <sup>4</sup> |
|              |  |                        | @type                 | 0...1<br>0/*  | String   | <b>Required.</b> Packaging item code type.<br>Valid values: <sup>5</sup> <ul style="list-style-type: none"> <li>• <b>CN-RESCODE</b></li> <li>• <b>GTIN-14</b></li> </ul>               |
|              |  |                        | cmn:CompanyPrefix     | 0...1<br>0/*  | String   | <b>Conditionally required</b> if <b>cmn:PackagingItemCode</b> is empty or null. The GS1 company prefix for the released product. <sup>6</sup>                                          |
|              |  |                        | cmn:PackagingLevel    | 1...1<br>1/*  | String   | <b>Required.</b> The packaging level of the commissioned item. <sup>7</sup><br>See the <a href="#">PackagingLevel</a> enumeration list for valid values.                               |
|              |  |                        | cmn:QuantityReported  | 1...1<br>-    | Integer  | <b>Required.</b> Quantity reported for the released product. <sup>8</sup>                                                                                                              |

<sup>1</sup>2019-03-18<sup>2</sup>2020-03-31T06:30:32.12Z<sup>3</sup>RU<sup>4</sup>50300694220667<sup>5</sup>GTIN-14<sup>6</sup>503006<sup>7</sup>EA<sup>8</sup>100



## Example

```
<?xml version="1.0" encoding="UTF-8"?>
<som:SOMMarketReleaseMessage xmlns:som="urn:tracelink:mapper:sl:serialized_operations_manager"
xmlns:cmn="urn:tracelink:mapper:sl:commontypes">
  <som:ControlFileHeader>
    <cmn:FileSenderNumber>8888882028644</cmn:FileSenderNumber>
    <cmn:FileReceiverNumber>8888882028677</cmn:FileReceiverNumber>
    <cmn:FileControlNumber>20200121065245</cmn:FileControlNumber>
    <cmn:FileDate>2020-03-31</cmn:FileDate>
    <cmn:FileTime>06:52:45.02Z</cmn:FileTime>
  </som:ControlFileHeader>
  <som:MessageBody>
    <cmn:EventLocation>0333331013655</cmn:EventLocation>
    <cmn:EventLocationType>GLN</cmn:EventLocationType>
    <!-- <cmn:InternalMaterialCode>100253</cmn:InternalMaterialCode> -->
    <cmn:PackagingItemCode type="GTIN-14">50300694220667</cmn:PackagingItemCode>
    <!-- <cmn:CountryDrugCode type="DE_PPN">123451234009</cmn:CountryDrugCode> -->
    <cmn:LotNumber>B234567</cmn:LotNumber>
    <cmn:NumberList>
      <cmn:Serial companyPrefix="50882025" format="AI(01)+AI(21)">015088202501033321100000060001</cmn:Serial>
      <cmn:Serial companyPrefix="50882025" format="AI(01)+AI(21)">015088202501033321100000060002</cmn:Serial>
      <cmn:Serial companyPrefix="50882025" format="AI(01)+AI(21)">015088202501033321100000060003</cmn:Serial>
      <cmn:Serial companyPrefix="50882025" format="AI(01)+AI(21)">015088202501033321100000060004</cmn:Serial>
    </cmn:NumberList>
    <cmn:TransactionIdentifier type="CIVILCIRCULATION" date="2020-03-30">9857462156</cmn:TransactionIdentifier>
    <cmn:EventDateTime>2020-03-31T06:30:32.12Z</cmn:EventDateTime>
    <cmn:MarketCountryCode>RU</cmn:MarketCountryCode>
    <cmn:ProductionQuantity>
      <cmn:PackagingItemCode type="GTIN-14">50300694220667</cmn:PackagingItemCode>
      <!-- <cmn:CompanyPrefix>503006</cmn:CompanyPrefix> -->
      <cmn:PackagingLevel>EA</cmn:PackagingLevel>
      <cmn:QuantityReported>1000</cmn:QuantityReported>
    </cmn:ProductionQuantity>
  </som:MessageBody>
</som:SOMMarketReleaseMessage>
```

## Errors

| Data Element                      | Error Message                                                                                                 | Description                                                                                                                                                |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                    |                                                                                                               |                                                                                                                                                            |
| cmn:InternalMaterialCode          | Only one of either InternalMaterialCode or PackagingItemCode or CountryDrugCode must be present in source !!! | The error occurs if <b>cmn:PackagingItemCode</b> , <b>cmn:CountryDrugCode</b> , and the source are all empty or null, or if more than one is present.      |
| cmn:PackagingItemCode             | Only one of either InternalMaterialCode or PackagingItemCode or CountryDrugCode must be present in source !!! | The error occurs if <b>cmn:InternalMaterialCode</b> , <b>cmn:CountryDrugCode</b> , and the source are all empty or null, or if more than one is present.   |
| cmn:CountryDrugCode               | Only one of either InternalMaterialCode or PackagingItemCode or CountryDrugCode must be present in source !!! | The error occurs if <b>cmn:InternalMaterialCode</b> , <b>cmn:PackagingItemCode</b> , and the source are all empty or null, or if more than one is present. |
| cmn:PackagingItemCode   @type     | Valid packaging item code type is required !!!                                                                | The error occurs if <b>cmn:PackagingItemCode</b> is present but the source is empty or null, or is not a valid value from the enumeration list             |
| cmn:CountryDrugCode   @type       | Country drug code type is required !!!                                                                        | The error occurs if <b>cmn:CountryDrugCode</b> is present but the source is empty or null, or is not a valid value from the enumeration list.              |
| cmn:LotNumber                     | Lot number is required !!!                                                                                    | The error occurs if the source is empty or null.                                                                                                           |
| cmn:TransactionIdentifier   @type | Valid transaction identifier type is required if TransactionIdentifier is populated !!!                       | The error occurs if the source is empty or null, or does not equal CIVILCIRCULATION or STATECONFIRMATION.                                                  |
| cmn:MarketCountryCode             | Valid ISO market country code is required !!!                                                                 | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                        |
| cmn:PackagingItemCode             | Only one of either packaging item code or company prefix may be present !!!                                   | The error occurs if both <b>cmn:CompanyPrefix</b> and the source are empty or null, or if both are present.                                                |
| cmn:PackagingItemCode   @type     | Valid packaging item code type is required !!!                                                                | The error occurs if <b>cmn:PackagingItemCode</b> is present but the source is empty or null, or is not a valid value from the enumeration list             |
| cmn:CompanyPrefix                 | Only one of either packaging item code or company prefix may be present !!!                                   | The error occurs if both <b>cmn:PackagingItemCode</b> and the source are empty or null, or if both are present.                                            |
| cmn:PackagingLevel                | Valid packaging level code required !!!                                                                       | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                        |
| <b>Class 2</b>                    |                                                                                                               |                                                                                                                                                            |
| cmn:LotNumber                     | Lot [LotNumber] for item <item code type> <item code value> does not contain any serial numbers.              | The error occurs if no serial numbers exist in the specified lot.                                                                                          |
|                                   | Lot [LotNumber] for item [item code type] [item code value] does not                                          | The error occurs if TraceLink cannot find the specified lot number                                                                                         |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Description                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                   | exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | associated with the specified item.                                                                           |
| cmn:MarketCountryCode                                                                                                                                             | [TargetMarket] is not a defined target market for this product.                                                                                                                                                                                                                                                                                                                                                                                                                | The error occurs if the source is not defined for the specified product.                                      |
| cmn:QuantityReported                                                                                                                                              | Market Release transaction processing failed due to serial number quantity verification failure. [quantity of commissioned serial number] at [packaging level] level found in the system but Market Release message reported lower quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location].  | The error occurs if there are more serial numbers in the lot than were specified in the source.               |
|                                                                                                                                                                   | Market Release transaction processing failed due to serial number quantity verification failure. [quantity of commissioned serial number] at [packaging level] level found in the system but Market Release message reported higher quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]. | The error occurs if there are fewer serial numbers in the lot than were specified in the source.              |
| cmn:Serial                                                                                                                                                        | Serial Number [SerialNumber] does not exist.                                                                                                                                                                                                                                                                                                                                                                                                                                   | The error occurs if the specified serial number does not exist within TraceLink.                              |
|                                                                                                                                                                   | Serial number [SerialNumber] is not commissioned.                                                                                                                                                                                                                                                                                                                                                                                                                              | The error occurs if the specified serial number is not commissioned.                                          |
|                                                                                                                                                                   | Serial Number [SerialNumber] is not associated with Item Code [SerialNumber] and Lot Number [SerialNumber].                                                                                                                                                                                                                                                                                                                                                                    | The error occurs if the specified serial number is not associated with the specified item code or lot number. |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                               |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                               |

## Market Release (SOAP)

### Market Release Request

## Guidelines

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

The following data is sent in the request to TraceLink:

| Data Element      |  |                      |  | Occurs Length | Type   | Description                                                                                                                                                                                                       |
|-------------------|--|----------------------|--|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| soapenv:Envelope  |  |                      |  | 1...1<br>-    | -      | <b>Required.</b> SOAP envelope root element.                                                                                                                                                                      |
| soapenv:Header    |  |                      |  | 1...1<br>-    | -      | <b>Required.</b> Not used.                                                                                                                                                                                        |
| soapenv:Body      |  |                      |  | 1...1<br>-    | -      | <b>Required.</b> SOAP message body.                                                                                                                                                                               |
| urn:MarketRelease |  |                      |  | 1...1<br>-    | -      | <b>Required.</b> Queries the status of the specified lot.                                                                                                                                                         |
|                   |  | PackagingCode        |  | 0...1<br>1/*  | String | <b>Conditionally required</b> if both <b>InternalMaterialCode</b> and <b>CountryDrugCode</b> are empty or null. Packaging level item code. <sup>1</sup>                                                           |
|                   |  | PackagingType        |  | 0...1<br>1/*  | String | <b>Conditionally required</b> if <b>PackagingCode</b> is present. Identifies the packaging level item code type. <sup>2</sup><br>See the <a href="#">PackagingItemCodeType</a> enumeration list for valid values. |
|                   |  | InternalMaterialCode |  | 0...1<br>1/*  | String | <b>Conditionally required</b> if both <b>PackagingCode</b> and <b>CountryDrugCode</b> are empty or null. Identifies the product using the internal item code configured in Product Master Data. <sup>3</sup>      |
|                   |  | CountryDrugCode      |  | 0...1<br>1/*  | String | <b>Conditionally required</b> if both <b>PackagingCode</b> and <b>InternalMaterialCode</b> are empty or null. Country drug code associated with the specified lot. <sup>4</sup>                                   |
|                   |  | CountryDrugCodeType  |  | 0...1         | String | <b>Conditionally required</b> if <b>CountryDrugCode</b> is present. Country drug code type. <sup>5</sup>                                                                                                          |

<sup>1</sup>882025030220

<sup>2</sup>GTIN14

<sup>3</sup>29100253

<sup>4</sup>08202503022

<sup>5</sup>US\_NDC542

| Data Element |  |  |                         |     | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|-------------------------|-----|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                         |     |               |        | See the <a href="#">CountryDrugCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  | Lot                     |     | 1...1<br>1/*  | String | <b>Required.</b> Lot number for the market release. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  | Items                   |     | 0...1<br>-    | -      | List of one or more serial numbers to release. Use for only a partial lot market release.                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | Item                    |     | 1...*<br>-    | -      | <b>Required.</b> The serial number to release into circulation.                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |                         | @sn | 1...1<br>1/*  | String | <b>Required.</b> Serial number in one of the following formats:<br>AI(01)+AI(21) <ul style="list-style-type: none"> <li>Format: 01 + [GTIN_14] + 21 + [serial number]</li> <li>Example: 015088202503022521100000090109</li> </ul> AI(00) <ul style="list-style-type: none"> <li>Format: 00 + [SSCC18]</li> <li>Example: 00008820200000047506</li> </ul> CN-EDMC <ul style="list-style-type: none"> <li>Format: 20-digit China EDMC code</li> <li>Example: 81530070000022519351</li> </ul> |
|              |  |  | TargetMarketCountryCode |     | 1...1<br>1/*  | String | <b>Required.</b> The two character ISO country code for the market country. <sup>2</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                     |
|              |  |  | EventDateTime           |     | 0...1<br>-    | Date   | Date and time of the market release, in GMT YYYY-MM-DDTHH:MM:SSZ format. <sup>3</sup><br>If omitted, TraceLink uses the current date and time.                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | EventLocation           |     | 0...1<br>1/*  | String | Site level location where the event occurs. Defaults to company level SGLN. SGLN format is numeric component only, with urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events). <sup>4</sup>                                                                                                                                                                                                                               |

<sup>1</sup>L201409132<sup>2</sup>DE<sup>3</sup>2015-06-01T17:10:16Z<sup>4</sup>8888882.02867.0

| Data Element |  |  |                      |                  |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|----------------------|------------------|--|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                      | @identifierType  |  | 1...1<br>1/*  | String | <b>Required.</b> The event location identifier type. <sup>1</sup><br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                  |
|              |  |  |                      | @identifierValue |  | 1...1<br>1/*  | String | <b>Required.</b> The event location value.                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  | Transactions         |                  |  | 0...1<br>-    | -      | List of one or more transaction identifiers.                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  | Transaction          |                  |  | 1...<br>-     | -      | <b>Required.</b> The transaction identifier associated with the market release.                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |                      | ItemID           |  | 0...1<br>1/*  | String | <b>Required.</b> The transaction identifier associated with the status update, for regulatory reporting and business tracking purposes. <sup>2</sup>                                                                                                                                                                                                                                                                                   |
|              |  |  |                      | ItemType         |  | 0...1<br>1/*  | String | <b>Required.</b> The transaction identifier type. <sup>3</sup><br>Valid values: <ul style="list-style-type: none"> <li><b>CIVILCIRCULATION</b> – Number of the document from a government agency for introduction of medicine into circulation used for immunobiological medicine only.</li> <li><b>STATECONFIRMATION</b> – Number of the document confirming the medicine compliance with state registration requirements.</li> </ul> |
|              |  |  |                      | Date             |  | 0...1<br>1/*  | String | The date of the transaction in YYYY-MM-DD format. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  | ProductionQuantities |                  |  | 0...1<br>-    | -      | Group of <b>ProductionQuantity</b> values for each packaging level in the hierarchy. Use to optionally validate serial number quantities.                                                                                                                                                                                                                                                                                              |
|              |  |  | ProductionQuantity   |                  |  | 0...<br>-     | -      | List of each aggregation hierarchy level.                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |                      | ItemType         |  | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>CompanyPrefix</b> is empty or null. Identifies the product using the packaging level item code (e.g. GTIN-14) configured in Product Master Data.                                                                                                                                                                                                                                                   |
|              |  |  |                      | ItemCodeType     |  | 1...1         | String | <b>Required.</b> Packaging item code type. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>GLN<sup>2</sup>PO303005<sup>3</sup>CIVILCIRCULATION<sup>4</sup>2015-06-01<sup>5</sup>GTIN-14

| Data Element |  |  |  |  |  |                  | Occurs Length | Type    | Description                                                                                                                                                      |
|--------------|--|--|--|--|--|------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                  |               |         | Valid values: <ul style="list-style-type: none"> <li>• <a href="#">CN_SUB_TYPE</a></li> <li>• <a href="#">GTIN_14</a></li> <li>• <a href="#">NTIN</a></li> </ul> |
|              |  |  |  |  |  | ItemCode         | 1...1<br>1/*  | String  | <b>Required.</b> Packaging level item code value. <sup>1</sup>                                                                                                   |
|              |  |  |  |  |  | CompanyPrefix    | 0...1<br>0/*  | String  | <b>Conditionally required</b> if <b>PackagingItemCode</b> is empty or null. GS1 company prefix. <sup>2</sup>                                                     |
|              |  |  |  |  |  | PackagingLevel   | 1...1<br>1/*  | String  | <b>Required.</b> The packaging level of the commissioned item. <sup>3</sup><br>See the <a href="#">PackLevel</a> enumeration list for valid values.              |
|              |  |  |  |  |  | QuantityReported | 1...1<br>1/*  | Integer | <b>Required.</b> Quantity report for the released product. <sup>4</sup>                                                                                          |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:MarketRelease>
      <CountryDrugCode>08620081794</CountryDrugCode>
      <CountryDrugCodeType>US_NDC542</CountryDrugCodeType>
      <LotNumber>GO36120CNQX2</LotNumber><SerialNumberList/>
      <Transactions>
        <Transaction>
          <ItemType>CIVILCIRCULATION</ItemType>
          <ItemID>1234</ItemID>
          <Date>2020-03-27</Date>
        </Transaction>
      </Transactions>
    </urn:MarketRelease>
  </soapenv:Body>
</soapenv:Envelope>
```

<sup>1</sup>00882026030229

<sup>2</sup>038522

<sup>3</sup>EA

<sup>4</sup>100

```

    <Transaction>
      <ItemType>STATECONFIRMATION</ItemType>
      <ItemID>4321</ItemID>
      <Date>2020-03-27</Date>
    </Transaction>
  </Transactions>
  <MarketCountryCode>RU</MarketCountryCode>
  <ProductionQuantities>
    <ProductionQuantity>
      <ItemType>
        <ItemCodeType>GTIN_14</ItemCodeType>
        <ItemCode>78708865247189</ItemCode>
      </ItemType>
      <PackagingLevel>EA</PackagingLevel>
      <QuantityReported>5</QuantityReported>
    </ProductionQuantity>
    <ProductionQuantity>
      <CompanyPrefix>9876</CompanyPrefix>
      <PackagingLevel>CA</PackagingLevel>
      <QuantityReported>1</QuantityReported>
    </ProductionQuantity>
  </ProductionQuantities>
</urn:MarketRelease>
</soapenv:Body>
</soapenv:Envelope>

```

## Errors

| Exception Code | Exception Message                                                                                   |
|----------------|-----------------------------------------------------------------------------------------------------|
| VALIDATION     | Serial Number <SerialNumber> does not exist.                                                        |
| VALIDATION     | Serial number <SerialNumber> is not commissioned.                                                   |
| VALIDATION     | Serial Number <SerialNumber> is not associated with Item Code <ItemCode> and Lot Number <LotNumber> |
| VALIDATION     | Lot <LotNumber> for item <item code type> <item code value> does not contain any serial numbers.    |
| VALIDATION     | Lot <LotNumber> for item <item code type> <item code value> does not exist.                         |



| Exception Code | Exception Message                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VALIDATION     | <TargetMarket> is not a defined target market for this product                                                                                                                                                                                                                                                                                                                                                                                                                 |
| VALIDATION     | Market Release transaction processing failed due to serial number quantity verification failure. [quantity of commissioned serial number] at [packaging level] level found in the system but Market Release message reported lower quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location].  |
| VALIDATION     | Market Release transaction processing failed due to serial number quantity verification failure. [Quantity of commissioned serial number] at [packaging level] level found in the system but Market Release message reported higher quantity [QuantityReported] for [country drug code/Internal Material Number ] [Product name in English if English is not available use the first language available alphabetically by language code] [packaging code /type] at [location]. |

## Market Release Response

### Guidelines

The following data is included in the message response:

| Data Element              | Occurs Length | Type    | Description                                                                                               |
|---------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------|
| S:Envelope                | 1...1<br>-    | -       | <b>Required.</b> SOAP envelope root element.                                                              |
| S:Body                    | 1...1<br>-    | -       | <b>Required.</b> SOAP message body.                                                                       |
| ns2:MarketReleaseResponse | 1...1<br>-    | -       | <b>Required.</b> Market Release response message.                                                         |
| TLResponse                | 0...1<br>-    | -       | <b>Required.</b> Response.                                                                                |
| Success                   | 0...1<br>-    | Boolean | <b>Required.</b> Indicates if the Market Release request message was processed successfully. <sup>1</sup> |
| ExceptionReturn           | 0...1<br>-    | -       | <b>Conditionally required</b> if <b>Success</b> = <b>false</b> . Error information if the request failed. |

<sup>1</sup>TRUE

| Data Element |  |  |  |  |                  | Occurs Length | Type   | Description                                                       |
|--------------|--|--|--|--|------------------|---------------|--------|-------------------------------------------------------------------|
|              |  |  |  |  | CallException    | 1...*<br>-    | -      | <b>Required.</b> Contains error details.                          |
|              |  |  |  |  | ExceptionCode    | 0...1<br>0/*  | String | <b>Required.</b> Error Code.                                      |
|              |  |  |  |  | ExceptionMessage | 0...1<br>0/*  | String | Message that further describes the error condition, if available. |

### Example

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:MarketReleaseResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns2:MarketReleaseResponse>
  </S:Body>
</S:Envelope>

```



# Decommissioning and destruction





# Decommission and destruction APIs

## Why do I use these messages?

Use the following messages to indicate that items or serial numbers are withdrawn from the supply chain as a result of decommissioning or destruction.

Decommissioning a serial number indicates that it has been withdrawn from the supply chain, but it can be reused again later (e.g. the serial number is decommissioned because it was commissioned with incorrect information). Destroying a serial number indicates that it is permanently withdrawn from the supply chain (e.g. the item that the serial number represents was physically destroyed).

## Which report do these messages generate?

These messages generate one of the following reports in the Russia Compliance application if their contents meet the report conditions:

- [552 - Withdrawal](#) – Captures information about serialized items that are removed from supply chain circulation as the result of a quality sample, decommissioning, or destruction in a warehouse.
- [542 - Destruction](#) – Captures information about serialized items that are disposed of in a destruction facility (i.e. the items are decommissioned or destroyed in TraceLink).

 TraceLink disaggregates the decommissioned or destroyed product if the serial numbers are aggregated to parent containers, which prompts a disaggregation event and initiates the [913 - Unit Extract](#) report.

## ESM Decommission (EPCIS v1.2)

### Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_ESM\_DECOMMISSION

**Info Exchange Display Name:** ESM Decommission

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element                        | Occurs Length | Type     | Description                                                                                                                                                                                                                    |
|-------------------------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument                 | 1...1<br>-    | -        | <b>Required.</b> The EPCISDocument element contains the EPCIS message root element.                                                                                                                                            |
| @schemaVersion                      | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. <sup>1</sup>                                                                                                                    |
| @creationDate                       | 1...1<br>1/*  | DateTime | <b>Required.</b> The date that the message was created in XML datetime format YYYY-MM-DDTHH:MM:SSZ. <sup>2</sup>                                                                                                               |
| EPCISHeader                         | 0...1<br>-    | -        | <b>Required.</b> XML file control header.                                                                                                                                                                                      |
| sbdh:StandardBusinessDocumentHeader | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information along with the document identification.                                                                          |
| sbdh:HeaderVersion                  | 1...1<br>0/*  | String   | <b>Required.</b> The version of the Standard Business Document Header (SBDH). The <b>sbdh:HeaderVersion</b> is set to 1.0. <sup>3</sup>                                                                                        |
| sbdh:Sender                         | 1...<br>*     | -        | <b>Required.</b> A unique identification key for the Sender party of the message, representing the organization which created the standard business document. The Sender element must only be used once with GS1 XML messages. |

<sup>1</sup>1.2

<sup>2</sup>2013-10-01T22:08:02Z

<sup>3</sup>1.0

| Data Element |  |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|-----------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | sbdh:Identifier             | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>1</sup></p> <p>Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p> GLNs do not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAtribbutes</a> enumeration list for valid values.</p> |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String | <p><b>Required.</b> The @Authority was previously expected to be set to GLN for GS1 XML messages. Update made in December 2016 changed this to take additional values.<sup>2</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | sbdh:Receiver               | 1...*<br>-    | -      | <p><b>Required.</b> A unique identification key for the direct Receiver party of the message, representing the organization which receives the standard business document. The Receiver element is used only once with GS1 XML messages.</p>                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | sbdh:Identifier             | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>3</sup></p> <p>Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <p> GLNs do not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAtribbutes</a> enumeration list for valid values.</p> |
|              |  |  |  | @Authority                  | 1...1<br>1/*  | String | <p><b>Required.</b> The @Authority was previously expected to be set to GLN for GS1 XML messages. Update made in December 2016 changed this to take additional values.<sup>4</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -      | <p><b>Required.</b> Identification group for the message.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>1</sup>1100001014507<sup>2</sup>GLN<sup>3</sup>0614141123452<sup>4</sup>GLN

| Data Element |  |           |             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                 |
|--------------|--|-----------|-------------|--------------------------|---------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |           |             | sbdh:Standard            | 1...1<br>0/*  | String   | <b>Required.</b> The name of the document standard contained in the file/message. The standard value for this field is <code>EPCglobal</code> . <sup>1</sup>                                                                                                                                                                |
|              |  |           |             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <b>Required.</b> The version of the document included. This is the complete version of the document itself and is different from the Header Version as these are hard-coded values. The TypeVersion is set to <code>1.0</code> . <sup>2</sup>                                                                               |
|              |  |           |             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information, which uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>3</sup>                                                                                   |
|              |  |           |             | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> Document type. The Type value is set to <code>Events</code> for an aggregation event. <sup>4</sup>                                                                                                                                                                                                         |
|              |  |           |             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> Date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <code>Z</code> to be appended; however if it is not included, the system assumes that the time is GMT and therefore appends the <code>Z</code> . <sup>5</sup>                        |
| EPCISBody    |  |           |             |                          | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for the decommission message.                                                                                                                                                                                                                                             |
|              |  | EventList |             |                          | 1...1<br>-    | -        | <b>Required.</b> Contains all events within the transaction including event details. The details of the decommission event are also included (e.g. event time, EPCs).<br><br>The <b>ObjectEvent</b> for decommissioning events is the only event expected in the <b>EventList</b> .                                         |
|              |  |           | ObjectEvent |                          | 0...*<br>-    | -        | ObjectEvent for the Decommissioning Events. EventList = ObjectEvent when: <ul style="list-style-type: none"> <li><b>action</b> = <code>DELETE</code></li> <li><b>bizStep</b> = <code>urn:epcglobal:cbv:bizstep:decommissioning</code></li> <li><b>disposition</b> = <code>urn:epcglobal:cbv:disp:inactive</code></li> </ul> |
|              |  |           |             | eventTime                | 1...1<br>1/*  | DateTime | <b>Required.</b> The date/time time stamp when the decommission event occurred. <sup>6</sup>                                                                                                                                                                                                                                |
|              |  |           |             | eventTimeZoneOffset      | 1...1         | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for eventTime.                                                                                                                                                                                            |

<sup>1</sup>EPCglobal<sup>2</sup>1.0<sup>3</sup>0000001<sup>4</sup>Events<sup>5</sup>2013-10-01T22:08:02Z<sup>6</sup>2013-10-01T22:08:02Z



| Data Element |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                  |
|--------------|--|--|--|--------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                    |               |        | 1                                                                                                                                                                                                            |
|              |  |  |  | epcList            | 1...1<br>-    | -      | <b>Required.</b> The EPCs of each item, case, and/or pallet decommissioned.                                                                                                                                  |
|              |  |  |  | epc                | 1...*<br>1/*  | String | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>2</sup>                                                                  |
|              |  |  |  | action             | 1...1<br>0/*  | String | <b>Required.</b> The action value must equal <b>DELETE</b> for a decommission event. <sup>3</sup>                                                                                                            |
|              |  |  |  | bizStep            | 1...1<br>0/*  | AnyURI | <b>Required.</b> The bizStep value must equal <b>urn:epcglobal:cbv:bizstep:decommissioning</b> for a decommission event. <sup>4</sup>                                                                        |
|              |  |  |  | disposition        | 1...1<br>0/*  | AnyURI | <b>Required.</b> The status of the message. The disposition value must equal <b>urn:epcglobal:cbv:disp:inactive</b> for a decommission event. <sup>5</sup>                                                   |
|              |  |  |  | readPoint          | 1...1<br>-    | -      | <b>Required.</b> The location where the event occurred, i.e. the warehouse GLN location ID and storage location (e.g. shelf, bin) in URN format, that recorded the decommission event.                       |
|              |  |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a more granular location identifier. <sup>6</sup>                                              |
|              |  |  |  | bizLocation        | 0...1<br>-    | -      | The business location of the message sender who executes the event. This may be a site-level SGLN, or a more granular location identifier.<br><br>Per GS1 standards, not used for the decommissioning event. |
|              |  |  |  | id                 | 1...1<br>1/*  | AnyURI | The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a more granular location identifier.                                                                           |
|              |  |  |  | bizTransactionList | 0...1<br>-    | -      | Business transaction list group.                                                                                                                                                                             |
|              |  |  |  | bizTransaction     | 1...*         | AnyURI | The transaction identifier associated with the decommissioned product. <sup>7</sup>                                                                                                                          |

<sup>1</sup>-04:00<sup>2</sup>urn:epc:id:sscc:030944.10105363280<sup>3</sup>DELETE<sup>4</sup>urn:epcglobal:cbv:bizstep:decommissioning<sup>5</sup>urn:epcglobal:cbv:disp:inactive<sup>6</sup>urn:epc:id:sgln:0614141.12345.RP1<sup>7</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016

| Data Element |  |  |  |                                |       | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--------------------------------|-------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                                | @type | 1...1<br>1/*  | String  | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul>                                                                                                                                                                                                                                   |
|              |  |  |  |                                | @date | 0...1<br>0/*  | Date    | Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | extension                      |       | 0...1<br>-    | -       | Not used - GS1 Reserved.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | tl:locationId                  |       | 0...1<br>0/*  | String  | External Subscriber Location identifier. When an external Serialized Operations Manager subscriber submits a message, the system uses the subscriber company integration user to perform the action and log this in the audit trail so that all messages executed by the external Serialized Operations Manager subscriber are attributed to that company.                                                                                                                                                                                                                                                                                             |
|              |  |  |  | @type                          |       | 1...1<br>0/*  | String  | <b>Required.</b> Attribute identifies the location types. <sup>2</sup><br>See the <a href="#">LocationIdType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | tl:decommissionEventExtensions |       | 0...1<br>-    | -       | Extensions used for Decommission <b>ObjectEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:transactionDate             |       | 0...1<br>0/*  | Date    | Date associated with the business transaction document in <b>bizTransactionList</b> in XML date format YYYY-MM-DD. This date may or may not be the same as the <b>eventTime</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | tl:disaggregateFromParent      |       | 0...1<br>1/*  | Boolean | Valid values: <ul style="list-style-type: none"> <li><b>true</b> - instructs the backend to disaggregate a serial number from its parent container (if aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b>.</li> <li><b>false</b> - (default) instructs the backend to generate an error when attempting to change the status of a serial number aggregated to a parent container.</li> </ul> <div>  If source is not populated, target will default to <b>false</b>.         </div> |

<sup>1</sup>2019-04-01<sup>2</sup>ABC123<sup>3</sup>2017-02-18

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|---------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  | tl:marketCountryCode      | 0...1<br>0/2  | String | The market country code. <sup>1</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | tl:businessPartyInfo      | 0...1<br>-    | -      | <b>Conditionally required</b> <b>Required.</b> The full business information (e.g. business type, contact information) associated with the authorizing party that decommissioned the serial numbers.                                                                                                                                                                                                                                           |
|              |  |  |  |  | tl:businessId             | 1...*<br>1/*  | String | <b>Required.</b> Identifier associated with the authorizing party. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String | <b>Required.</b> The type of the Business ID identifier. <sup>3</sup><br><div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values. |
|              |  |  |  |  | tl:businessClassification | 0...1<br>0/*  | String | Business classification.<br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -      | Populate with the business name and address of the authorizing business entity.                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:businessName           | 1...1<br>1/*  | String | <b>Required.</b> Business name of the entity that authorizes the decommissioning of the serial numbers. <sup>4</sup>                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | tl:street1                | 1...1<br>1/*  | String | <b>Required.</b> First line of the address for the company indicated in <b>tl:businessName</b> . <sup>5</sup>                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | tl:street2                | 0...1<br>0/*  | String | Second line of the address for the company indicated in <b>tl:businessName</b> . <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>US<sup>2</sup>8888882028677<sup>3</sup>GLN<sup>4</sup>Kendall Pharma<sup>5</sup>300 Trade Center<sup>6</sup>Suite 7690

| Data Element |  |  |  |  |  |                      | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--|--|----------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:city              | 1...1<br>1/*  | String | <b>Required.</b> The city for the company indicated in <b>tl:businessName</b> . <sup>1</sup>                                                                                                                                                                                                      |
|              |  |  |  |  |  | tl:village           | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:houseNumber       | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> .                                                       |
|              |  |  |  |  |  | tl:township          | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:district          | 0...1<br>0/*  | String | <b>Conditionally required</b> for India. District Code only for India. <sup>2</sup><br><br><div>  Must be a 3-digit numeric code. </div>                                                                        |
|              |  |  |  |  |  | tl:stateOrRegion     | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region of the business entity indicated in the <b>businessName</b> field, using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code. <sup>3</sup>                                                                 |
|              |  |  |  |  |  | tl:postalCode        | 0...1<br>1/*  | String | The postal code for the company indicated in <b>tl:businessName</b> . <sup>4</sup>                                                                                                                                                                                                                |
|              |  |  |  |  |  | tl:country           | 1...1<br>1/*  | String | <b>Required.</b> The country where the company indicated in the businessName field is located. The country uses the standard two-letter abbreviation specified in ISO 3166-1 alpha-2:1997 country code. <sup>5</sup><br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  |  | tl:corporateFax      | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                                               |
|              |  |  |  |  |  | tl:addressObjectGUID | 0...1<br>0/*  | String | The global identifier assigned by Russian Federation Information Address System (FIAS). <sup>6</sup><br><br><div>  Maximum 36 characters, using the digits 0-9 and letters A-F </div>                         |

<sup>1</sup>Woburn<sup>2</sup>123<sup>3</sup>MA<sup>4</sup>01801<sup>5</sup>US<sup>6</sup>19406454-0022-000C-00B0-000000000152

| Data Element |  |  |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|--|--|--|---------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  | tl:houseGUID              | 0...1<br>0/*  | String | The global House identifier assigned by the Russian Federation Information Address System (FIAS). <sup>1</sup><br><br><div>  Maximum 36 characters, using the digits 0-9 and letters A-F </div> |
|              |  |  |  |  |  |  | tl:taxRegistrationCode    | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                            |
|              |  |  |  |  |  |  | tl:premisesCode           | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                             |
|              |  |  |  |  |  |  | tl:warehouseOperatorName  | 0...1<br>0/*  | String | <b>Conditionally required</b> for China. Name of the person responsible for warehouse operations in the transfer from business entity (where the serial numbers were decommissioned). <sup>2</sup>                                                                                |
|              |  |  |  |  |  |  | tl:decommissionReasonCode | 0...1<br>0/*  | String | Reason code for decommission. <sup>3</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                                                                                                   |
|              |  |  |  |  |  |  | tl:reasonDescription      | 0...1<br>0/*  | String | The reason the product was decommissioned. <sup>4</sup>                                                                                                                                                                                                                           |
|              |  |  |  |  |  |  | tl:destructionMethod      | 0...1<br>0/*  | String | Method of destruction. <sup>5</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                                                                                                               |

## Example

```
<epcis:EPCISDocument xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcglobal="urn:epcglobal:xsd:1" schemaVersion="1" creationDate="2014-02-28T19:12:53Z">
<EPCISHeader>
  <sbdh:StandardBusinessDocumentHeader>
    <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
    <sbdh:Sender>
      <sbdh:Identifier Authority="GLN">81100001014507</sbdh:Identifier>
```

<sup>1</sup>19606494-0022-000A-0067-000000001259

<sup>2</sup>John Smith

<sup>3</sup>DAMAGED

<sup>4</sup>Damaged from production

<sup>5</sup>LIQUID\_DILUTION\_DRAINAGE

```

</sbdh:Sender>
<sbdh:Receiver>
  <sbdh:Identifier Authority="GLN">0614141123452</sbdh:Identifier>
</sbdh:Receiver>
<sbdh:DocumentIdentification>
  <sbdh:Standard>EPCglobal</sbdh:Standard>
  <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
  <sbdh:InstanceIdentifier>2013082106310032</sbdh:InstanceIdentifier>
  <sbdh:Type>Events</sbdh:Type>
  <sbdh:CreationDateAndTime>2015-04-30T19:12:53Z</sbdh:CreationDateAndTime>
</sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <ObjectEvent>
      <eventTime>2015-06-30T08:30:21Z</eventTime>
      <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
      <epcList>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207026272</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.15870395191309</epc>
        <epc>urn:epc:id:sgtin:068202.5401034.40000000000019</epc>
      </epcList>
      <action>DELETE</action>
      <bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
      <disposition>urn:epcglobal:cbv:disp:inactive</disposition>
      <readPoint>
        <id>urn:epc:id:sgln:8888882.02867.0</id>
      </readPoint>
      <bizLocation>
        <id>urn:epc:id:sgln:8888882.02867.0</id>
      </bizLocation>
      <bizTransactionList>
        <bizTransaction type="http://epcis.tracelink.com/hc/btt/removal" date="2019-04-
01">123456789</bizTransaction>
      </bizTransactionList>
      <tl:decomissionEventExtensions>
        <tl:transactionDate>2015-06-30</tl:transactionDate>
        <tl:marketCountryCode>RU</tl:marketCountryCode>
        <tl:businessPartyInfo>

```

```

<tl:businessId type="GLN">8888882028677</tl:businessId>
<tl:businessClassification>MANUFACTURER</tl:businessClassification>
<tl:BusinessPartyDetail>
  <tl:businessName>Russian Pharma</tl:businessName>
  <tl:street1>Bolshoy Devyatinsky Lane 8</tl:street1>
  <tl:city>Moskva</tl:city>
  <tl:stateOrRegion>Presnensky</tl:stateOrRegion>
  <tl:postalCode>121099</tl:postalCode>
  <tl:country>RU</tl:country>
  <tl:addressObjectGUID>19406454-0022-000C-00B0-000000000152</tl:addressObjectGUID>
  <tl:houseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</tl:houseGUID>
</tl:BusinessPartyDetail>
</tl:businessPartyInfo>
<tl:warehouseOperatorName>Sergei Smith</tl:warehouseOperatorName>
<tl:decommissionReasonCode>DAMAGED</tl:decommissionReasonCode>
<tl:reasonDescription>Damaged from production</tl:reasonDescription>
</tl:decomissionEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                  | Error Message                                                                         | Description                                                                                                                                     |
|-------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Class 1</b>                |                                                                                       |                                                                                                                                                 |
| action                        | Action DELETE is required for ObjectEvent decommissioning !!!                         | The error occurs if the source does not equal "DELETE".                                                                                         |
| bizStep                       | bizStep urn:epcglobal:cbv:bizstep:decommissioning is required for decommissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:decommissioning".                                                      |
| bizTransaction   <b>@type</b> | Valid bizTransaction type is required if bizTransaction is populated !!!              | The error occurs if bizTransaction is present and the source is empty or null, or if the source is not a valid value from the enumeration list. |
| disposition                   | Disposition urn:epcglobal:cbv:disp:inactive is required for decommissioning !!!       | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:inactive".                                                                |
| epc                           | Invalid EPC format !!!                                                                | The error occurs if the source cannot be translated.                                                                                            |
| epc                           | Invalid EPC format !!!                                                                | The error occurs if the source is invalid.                                                                                                      |

| Data Element                                 | Error Message                                                              | Description                                                                                                     |
|----------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| ObjectEvent                                  | ObjectEvent is required for decommissioning !!!                            | The error occurs if the source is empty or null.                                                                |
| readPoint   id                               | Source read point ID is required !!!                                       | The error occurs if the source is empty or null.                                                                |
| sbdh:Sender   sbdh:Identifier   @Authority   | Valid Sender/Identifier Authority is required !!!                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| sbdh:Receiver   sbdh:Identifier   @Authority | Valid Receiver/Identifier Authority is required !!!                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| tl:businessClassification                    | Valid business classification value is required !!!                        | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| tl:businessId                                | Business party identifier is required !!!                                  | The error occurs if the source is empty or null.                                                                |
| tl:businessId   @type                        | Party type attribute is required when BusinessId is populated !!!          | The error occurs if businessId is populated, but the source is empty or null.                                   |
| tl:businessId   @type                        | Valid business identifier type is required !!!                             | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| tl:locationId   @type                        | Valid location identifier type is required if location ID is populated !!! | The error occurs if the source empty or null, or is present, but there is no matching entry in the lookup file. |
| tl:businessName                              | Business party name is required !!!                                        | The error occurs if the source is empty or null.                                                                |
| tl:city                                      | Business party city is required !!!                                        | The error occurs if the source is empty or null.                                                                |
| tl:country                                   | Business party country is required !!!                                     | The error occurs if the source is empty or null.                                                                |
| tl:decommissionReasonCode                    | Valid reason code is required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| tl:destructionMethod                         | Valid destruction method code is required !!!                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                   |
| tl:district                                  | 3-digit numeric District code required for country India !!!               | The error occurs if country = "IN", but the source is not a 3-digit numeric code.                               |
| tl:marketCountryCode                         | Market Country Code must be at least two characters !!!                    | The error occurs if the source is less than 2 characters.                                                       |
| tl:stateOrRegion                             | Business party state or region is required !!!                             | The error occurs if the source is empty or null.                                                                |
| tl:street1                                   | Business party street address is required !!!                              | The error occurs if the source is empty or null.                                                                |



| Data Element                                                                                                                                                      | Error Message                                                                                             | Description                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| tl:warehouseOperatorName                                                                                                                                          | Warehouse operator name for China product is required !!!                                                 | The error occurs if epc = "http://epcis.tracelink.com/hc/cn-edmc/obj/", but the source is empty or null. |
| <b>Class 2</b>                                                                                                                                                    |                                                                                                           |                                                                                                          |
| tl:addressObjectGUID                                                                                                                                              | AddressObjectGUID cannot be blank for Country RU                                                          | The error occurs if tl:country = "RU", but the source is empty or null.                                  |
| tl:businessPartyInfo                                                                                                                                              | Reporting Party is required when Transactions are included in the request and products are sold in Russia | The error occurs if a Target Market in Product Master Data = "RU", but the source is empty or null.      |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                           |                                                                                                          |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                           |                                                                                                          |

# Decommission Event (EPCIS v1.2)

## Guidelines

CMOs and 3PLs use this message to decommission serial numbers on behalf of the product's MAH who owns Serialized Operations Manager. The event data uses the GS1 EPCIS format with extensions in the TraceLink namespace for additional decommission data elements that provide business and regulatory information.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_DECOMMISSION\_EVENT

**Info Exchange Display Name:** Decommission Event

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

ⓘ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.1000000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit].[item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type | Description                                  |
|---------------------|---------------|------|----------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -    | <b>Required.</b> EPCIS message root element. |

| Data Element |                                     |                    |                 |            | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|-------------------------------------|--------------------|-----------------|------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | @schemaVersion                      |                    |                 |            | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              | @creationDate                       |                    |                 |            | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in XML DateTime format YYYY-MM-DDTHH:MM:SS:mmZ. <sup>2</sup><br> Mandatory according to the EPCIS standard.                                                                                                                                                                                                                                                                                                |
|              | EPCISHeader                         |                    |                 |            | 1...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              | sbdh:StandardBusinessDocumentHeader |                    |                 |            | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                       |
|              |                                     | sbdh:HeaderVersion |                 |            | 1...1<br>0/*  | String   | <b>Required.</b> The version of the Standard Business Document Header (SBDH). The <b>sbdh:HeaderVersion</b> is set to 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |                                     | sbdh:Sender        |                 |            | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the Sender party of the message, representing the organization that created the standard business document. The <b>sbdh:Sender</b> element must only be used once with GS1 XML messages.                                                                                                                                                                                                                                                                                                   |
|              |                                     |                    | sbdh:Identifier |            | 1...1<br>1/*  | String   | <b>Required.</b> A GLN, SGLN, or any other supported business party type. <sup>4</sup><br>SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example: <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul>  GLN will not have a urn/http prefix.<br>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values. |
|              |                                     |                    |                 | @Authority | 1...1<br>1/*  | String   | <b>Required.</b> The Authority was previously expected to be set to GLN for GS1 XML messages. Update made in December 2016 changed this to take additional values. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                             |

<sup>1</sup>1.2<sup>2</sup>2016-02-28T19:12:53Z<sup>3</sup>1.0<sup>4</sup>81100001014507<sup>5</sup>GLN

| Data Element |  |  |                             |            |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|-----------------------------|------------|--|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |            |  |               |        | See the <a href="#">MDPartyTypeEnum</a> s enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  | sbdh:Receiver               |            |  | 1...*<br>-    | -      | <b>Required.</b> A unique identification key for the direct Receiver party of the message, representing the organization which receives the standard business document. The <b>sbdh:Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | sbdh:Identifier             |            |  | 1...1<br>1/*  | String | <p><b>Required.</b> A GLN, SGLN, or any other supported business party type.</p> <p>SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li>• <a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li>• <a href="#">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <div>  GLN will not have a urn/http prefix. </div> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |                             | @Authority |  | 1...1<br>1/*  | String | <p><b>Required.</b> The Authority was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. Update made in December 2016 changed this to take additional values.</p> <p>See the <a href="#">MDPartyTypeEnum</a>s enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                 |
|              |  |  | sbdh:DocumentIdentification |            |  | 1...1<br>-    | -      | <b>Required.</b> The identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | sbdh:Standard               |            |  | 1...1<br>0/*  | String | <b>Required.</b> The name of the document standard contained in the file/message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  | sbdh:TypeVersion            |            |  | 1...1<br>0/*  | String | <b>Required.</b> The version of the document included. This is the complete version of the document itself and is different from the <b>sbdh:HeaderVersion</b> as these are hard-coded values. The <b>sbdh:TypeVersion</b> is set to <a href="#">1.0</a> . <sup>2</sup>                                                                                                                                                                                                                                                                                                                      |
|              |  |  | sbdh:InstanceIdentifier     |            |  | 1...1<br>1/*  | String | <b>Required.</b> The reference information, which uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This is a hard-coded value. This identifier confirms this document as being distinct from others. <sup>3</sup>                                                                                                                                                                                                                                                                                                                    |
|              |  |  | sbdh:Type                   |            |  | 1...1         | String | <b>Required.</b> The document type. The <b>sbdh:Type</b> value is set to <a href="#">Events</a> for a shipment event. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>EPCglobal<sup>2</sup>1.0<sup>3</sup>2013082106310032<sup>4</sup>Events

| Data Element |           |             |  |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-----------|-------------|--|--------------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |             |  | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> Date and time of the SBDH document creation in XML DateTime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>1</sup>                                                                                                                                                                                                                                                     |
|              | EPCISBody |             |  |                          | 1...1<br>-    | -        | <b>Required.</b> All of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                    |
|              | EventList |             |  |                          | 1...1<br>-    | -        | <b>Required.</b> The <b>ObjectEvent</b> for decommissioning events is the only event expected in the <b>EventList</b> .                                                                                                                                                                                                                                                       |
|              |           | ObjectEvent |  |                          | 1...*<br>-    | -        | <b>Required.</b> The <b>ObjectEvent</b> field records decommission events when the following criteria is set accordingly.                                                                                                                                                                                                                                                     |
|              |           |             |  | eventTime                | 1...1<br>1/*  | DateTime | <b>Required.</b> Timestamp of date/time when the event occurred. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1] in XML DateTime format YYYY-MM-DDTHH:MM:SS.mmZ. <sup>2</sup>                                                                                                                                                                  |
|              |           |             |  | eventTimeZoneOffset      | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for <b>eventTime</b> . A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time - whether it is standard time or daylight saving time. Per Section 7.2.8 of (EPCIS1.0.1). <sup>3</sup> |
|              |           |             |  | epcList                  | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each decommissioned item, case, and/or pallet.                                                                                                                                                                                                                                                                                                   |
|              |           |             |  | epc                      | 1...*<br>1/*  | String   | <b>Required.</b> An item, pallet, or case EPC identifier in EPC Pure Identity URI format. Numerous EPC identifiers can be provided, which creates a list of items/cases. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>4</sup>                                                                                                                               |
|              |           |             |  | action                   | 1...1<br>0/*  | String   | <b>Required.</b> The action taken in the transaction. The <b>action</b> value is set to <b>DELETE</b> for a decommission event. <sup>5</sup>                                                                                                                                                                                                                                  |
|              |           |             |  | bizStep                  | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value is set to <b>urn:epcglobal:cbv:bizstep:decommissioning</b> for a decommission event. <sup>6</sup>                                                                                                                                                                                             |

<sup>1</sup>2016-04-30T19:12:53Z<sup>2</sup>2016-04-30T08:30:21Z<sup>3</sup>-05:00<sup>4</sup>See [EPC Pure Identifier Format Examples](#).<sup>5</sup>DELETE<sup>6</sup>urn:epcglobal:cbv:bizstep:decommissioning

| Data Element |  |  |  |                    |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|--------------------|--|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | disposition        |  | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> , <b>disposition</b> , and <b>action</b> fields define the message event and are grouped together under the GS1 EPCIS guidelines. The disposition indicates the status of the message. The <b>disposition</b> value is set to <code>urn:epcglobal:cbv:disp:inactive</code> for a decommission event. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  | readPoint          |  | 1...1<br>-    | -      | <b>Required.</b> The location where the event occurred. Defined with GS1-conformant party identifier types with full urn or http prefix. SGLN is strongly preferred, but other party types are supported. <div>  <b>readPoint</b> links to location party address data if the data is present in VocabularyElement   @id. Use <b>readPoint</b> for master data lookup if it does not link to the location identifier in VocabularyElement   @id. </div>                                                                                                                                                                                                                           |
|              |  |  |  | id                 |  | 1...1<br>0/*  | AnyURI | <b>Required.</b> The party identifier of the location where the decommissioning event occurs. SGLN is strongly preferred for GS1 conformance, but other party identifiers are also supported. This may be a site-level SGLN or a finer-grain location identifier. <sup>2</sup> <div>  If the location address info is populated in <b>EPCISMasterData</b> header extension, this location identifier links to VocabularyElement   @id. If the location address is not present in <b>VocabularyElement</b>, this identifier is used for master data lookup in the TraceLink system. </div> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  | bizLocation        |  | 0...1<br>-    | -      | The location where the event occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | id                 |  | 0...1<br>1/*  | AnyURI | The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a finer-grain location identifier. Omitted for decommissioning event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | bizTransactionList |  | 0...1<br>-    | -      | Business transaction list group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | bizTransaction     |  | 1...*<br>0/*  | AnyURI | The transaction identifier associated with the decommissioned product. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | @type              |  | 1...1         | String | <b>Required.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>urn:epcglobal:cbv:disp:inactive<sup>2</sup>urn:epc:id:sgln:8888882.02867.0<sup>3</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016

| Data Element |  |  |  |                                |                           |  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--------------------------------|---------------------------|--|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                                |                           |  |               |         | The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul>                                                                                                                                       |
|              |  |  |  |                                | @date                     |  | 0...1<br>0/*  | Date    | Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:locationId                  |                           |  | 0...1<br>-    | String  | Serialized Operations Manager External Subscriber Location identifier. Type of identifier defined by the type enum below.<br><br>When transactions are submitted by an external Serialized Operations Manager partner, the system will use the subscriber company integration user to perform the action and log this in the audit trail so that all messages executed by the external Serialized Operations Manager partner are attributed to that company. <sup>2</sup>                                                              |
|              |  |  |  |                                | @type                     |  | 1...1<br>1/*  | String  | <b>Required.</b> Attribute that identifies the location types. <sup>3</sup><br>See the <a href="#">MessagePartyIdType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:decommissionEventExtensions |                           |  | 0...1<br>-    | -       | Extensions used for <b>ObjectEvent</b> Decommissioning.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |                                | tl:transactionDate        |  | 0...1<br>0/*  | Date    | Date associated with the business transaction document in <b>bizTransactionList</b> in XML date format YYYY-MM-DD. This date may or may not be the same as the <b>eventTime</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |                                | tl:disaggregateFromParent |  | 0...1<br>1/*  | Boolean | When set to <b>true</b> , instructs the backend to disaggregate a serial number from its parent container (if it is aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> .<br><br>If not set, or set to <b>false</b> , the backend operates in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container.<br><br>If source is not populated, target defaults to <b>false</b> . |
|              |  |  |  |                                | tl:marketCountryCode      |  | 0...1<br>2/2  | String  | The market country code. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

<sup>1</sup>2019-04-01<sup>2</sup>8888882028677<sup>3</sup>GLN<sup>4</sup>2015-04-30<sup>5</sup>US

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|--|---------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                           |               |        | See the <a href="#">ISOCountryCode</a> enumeration list for valid values.                                                                                                                                                                                                                                                           |
|              |  |  |  |  | tl:businessPartyInfo      | 0...1<br>0/*  | -      | <b>Required.</b> Authorizing party information for the decommissioning event. <div> <i>ⓘ</i> Master data lookup is supported for decommissioning events if the full location address is not present. If master data lookup is not intended, send complete address information for the location of the decommissioning event. </div> |
|              |  |  |  |  | tl:businessId             | 1...*<br>0/*  | String | <b>Required.</b> Identifier associated with the authorizing business entity.                                                                                                                                                                                                                                                        |
|              |  |  |  |  | @type                     | 1...1<br>0/*  | String | <b>Required.</b> The business identifier type.<br>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.                                                                                                                                                                                                  |
|              |  |  |  |  | tl:businessClassification | 1...1<br>0/*  | String | The classification of the business.<br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                            |
|              |  |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -      | Business name and address of the authorizing business entity.                                                                                                                                                                                                                                                                       |
|              |  |  |  |  | tl:businessName           | 1...1<br>0/*  | String | <b>Required.</b> Business name of the entity that is authorizing the decommissioning of the serial numbers.                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:street1                | 1...1<br>0/*  | String | <b>Required.</b> First line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                    |
|              |  |  |  |  | tl:street2                | 0...1<br>0/*  | String | Second line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                    |
|              |  |  |  |  | tl:city                   | 1...1<br>0/*  | String | <b>Required.</b> City for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | tl:houseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> .                                                                                         |
|              |  |  |  |  | tl:township               | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                                                               |



| Data Element |  |  |  |  |  |                          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|--|--------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:district              | 0...1<br>0/*  | String | <p><b>Conditionally required</b> for India. District code.</p> <p> Must be a 3-digit numeric code.</p>                                                                                                   |
|              |  |  |  |  |  | tl:stateOrRegion         | 1...1<br>0/*  | String | <p><b>Required.</b> The state, province, or region of the business entity indicated in <b>tl:businessName</b>, using the standard two-letter abbreviation specified in the ISO 3166-2:1998 country subdivision code.</p>                                                                    |
|              |  |  |  |  |  | tl:postalCode            | 0...1<br>1/*  | String | <p>Postal code for the company indicated in <b>tl:businessName</b>.</p>                                                                                                                                                                                                                     |
|              |  |  |  |  |  | tl:country               | 1...1<br>0/*  | String | <p><b>Required.</b> The country where the company indicated in <b>tl:businessName</b> is located. The country uses the standard two-letter abbreviation specified in the ISO 3166-1alpha-2:1997 country code. See the <a href="#">ISOCountryCode</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | tl:corporateFax          | 0...1<br>0/*  | String | <p>Company fax number.</p>                                                                                                                                                                                                                                                                  |
|              |  |  |  |  |  | tl:addressObjectGUID     | 0...1<br>0/36 | String | <p>The global identifier assigned by the Russian Federation Information Address System (FIAS).<sup>1</sup></p> <p> Maximum of 36 characters, using the digits 0-9 and letters A-F</p>                    |
|              |  |  |  |  |  | tl:houseGUID             | 0...1<br>0/36 | String | <p>The global house identifier assigned by the Russian Federation Information Address System (FIAS).<sup>2</sup></p> <p> Maximum of 36 characters, using the digits 0-9 and letters A-F</p>             |
|              |  |  |  |  |  | tl:taxRegistrationCode   | 0...1<br>0/*  | String | <p>The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).</p>                                                                                                                                                               |
|              |  |  |  |  |  | tl:premisesCode          | 0...1<br>0/*  | String | <p>Identifier representing a physical area within the company location (e.g. a location's second floor).</p>                                                                                                                                                                                |
|              |  |  |  |  |  | tl:warehouseOperatorName | 0...1         | String | <p><b>Conditionally required</b> for China. Name of the person responsible for warehouse operations in</p>                                                                                                                                                                                  |

<sup>1</sup>19406454-0022-000C-00B0-0000000000152

<sup>2</sup>986f2934-be05-438f-A30E-c15b90e15dbc

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                        |
|--------------|--|--|--|--|---------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                           |               |        | 1                                                                                                                                  |
|              |  |  |  |  | tl:decommissionReasonCode | 0...1<br>0/*  | String | Reason code for decommissioning. <sup>2</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values. |
|              |  |  |  |  | tl:reasonDescription      | 0...1<br>0/*  | String | Description of why the product was decommissioned. <sup>3</sup>                                                                    |
|              |  |  |  |  | tl:destructionMethod      | 0...1<br>0/*  | String | Method of destruction. <sup>4</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                |

## Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<epcis:EPCISDocument xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
  xmlns:epcglobal="urn:epcglobal:xsd:1" schemaVersion="1.2" creationDate="2018-01-30T08:30:21Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">6667771013655</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">8887771013655</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>201911221845200002</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
        <sbdh:CreationDateAndTime>2019-11-22T18:45:20.0Z</sbdh:CreationDateAndTime>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>John Smith

<sup>2</sup>PRODUCTION\_DEFECT

<sup>3</sup>Defect from production

<sup>4</sup>LIQUID\_DILUTION\_DRAINAGE

```

    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
  <EPCISBody>
    <EventList>
      <ObjectEvent>
        <eventTime>2019-11-22T18:45:20.0Z</eventTime>
        <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
        <epcList>
          <epc>urn:epc:id:sgtin:068202.0401034.11220207024594</epc>
          <epc>urn:epc:id:sgtin:068202.0401034.11220207024595</epc>
        </epcList>
        <action>DELETE</action>
        <bizStep>urn:epcglobal:cbv:bizstep:decommissioning</bizStep>
        <disposition>urn:epcglobal:cbv:disp:inactive</disposition>
        <readPoint>
          <id>urn:epc:id:sgln:6667771.01365.0</id>
        </readPoint>
        <bizLocation>
          <id>urn:epc:id:sgln:6667771.01365.0</id>
        </bizLocation>
        <tl:locationId type="GLN">6667771013655</tl:locationId>
        <tl:decommissionEventExtensions>
          <tl:transactionDate>2019-11-22</tl:transactionDate>
          <tl:disaggregateFromParent>false</tl:disaggregateFromParent>
          <tl:marketCountryCode>RU</tl:marketCountryCode>
          <tl:businessPartyInfo>
            <tl:businessId type="SGLN">088202.867778.0</tl:businessId>
            <tl:businessClassification>DISTRIBUTOR</tl:businessClassification>
            <tl:BusinessPartyDetail>
              <tl:businessName>Russia Pharma</tl:businessName>
              <tl:street1>Bolshoy Devyatinsky Lane 8</tl:street1>
              <tl:city>Moskva</tl:city>
              <tl:stateOrRegion>Presnensky</tl:stateOrRegion>
              <tl:postalCode>121099</tl:postalCode>
              <tl:country>RU</tl:country>
              <tl:addressObjectGUID>19406454-0022-000C-00B0-000000000152</tl:addressObjectGUID>
              <tl:houseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</tl:houseGUID>
            </tl:BusinessPartyDetail>
          </tl:businessPartyInfo>
          <tl:warehouseOperatorName>Sergei Smith</tl:warehouseOperatorName>
        </tl:decommissionEventExtensions>
      </ObjectEvent>
    </EventList>
  </EPCISBody>
</EPCIS>

```

```

        <tl:decommissionReasonCode>DAMAGED</tl:decommissionReasonCode>
        <tl:reasonDescription>Defect from production</tl:reasonDescription>
    </tl:decommissionEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                           | Error Message                                                                         | Description                                                                                         | Inbound / Outbound |
|--------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------|
| <b>Class 1</b>                                         |                                                                                       |                                                                                                     |                    |
| sbdh:Sender   <b>sbdh:Identifier</b>                   | Source message sender is required !!!                                                 | The error occurs if the source is empty or null.                                                    | OB                 |
| sbdh:Sender   sbdh:Identifier  <br><b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!                                     | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | IB                 |
|                                                        | Partner type in source type attribute is required !!!                                 | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | OB                 |
| sbdh:Receiver  <br><b>sbdh:Identifier</b>              | Source message receiver is required !!!                                               | The error occurs if the source is empty or null.                                                    | OB                 |
| sbdh:Receiver   sbdh:Identifier<br>  <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!                                   | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | IB                 |
|                                                        | Partner type in source type attribute is required !!!                                 | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | OB                 |
| ObjectEvent                                            | ObjectEvent is required for decommissioning !!!                                       | The error occurs if the source is empty or null.                                                    | IB                 |
| epc                                                    | Invalid EPC format !!!                                                                | The error occurs if the number could not be translated, or has any other unrecognized content.      | IB                 |
|                                                        | Serial number is required !!!                                                         | The error occurs if the source is empty or null.                                                    | OB                 |
| action                                                 | Action DELETE is required for decommissioning !!!                                     | The error occurs if the source does not equal "DELETE" for the decommission event.                  | IB                 |
| bizstep                                                | bizStep urn:epcglobal:cbv:bizstep:decommissioning is required for decommissioning !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:decommissioning".          | IB                 |
| disposition                                            | Disposition urn:epcglobal:cbv:disp:inactive is required for decommissioning !!!       | The error occurs if the source does not equal                                                       | IB                 |

| Data Element                  | Error Message                                                                           | Description                                                                                                                                            | Inbound / Outbound |
|-------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|                               |                                                                                         | "urn:epcglobal:cbv:disp:inactive".                                                                                                                     |                    |
| readPoint   <b>id</b>         | Source read point ID is required !!!                                                    | The error occurs if the source is empty or null.                                                                                                       | IB                 |
|                               | Event Location Required !!!                                                             | The error occurs if the source is empty or null.                                                                                                       | OB                 |
|                               | Valid decommission event location identifier type is required !!!                       | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                          | IB                 |
|                               | Valid Event Location Type Required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                          | OB                 |
| bizTransaction   <b>@type</b> | Valid bizTransaction type is required if bizTransaction is populated !!!                | The error occurs if <b>bizTransaction</b> is present and the source is empty or null, or if the source is not a valid value from the enumeration list. | IB                 |
|                               | Valid transaction identifier type is required if TransactionIdentifier is populated !!! | The error occurs if TransactionIdentifier is present and the source is empty or null, or if the source is not a valid value from the enumeration list. | OB                 |
| locationId   <b>@type</b>     | Valid location identifier type is required if location ID is populated !!!              | The error occurs if the source is empty or null, or is not a valid value from the enumeration list.                                                    | IB                 |
| tl:transactionDate            | Transaction date is required !!!                                                        | The error occurs if the source is empty or null.                                                                                                       | OB                 |
| tl:marketCountryCode          | Market Country Code must be at least two characters !!!                                 | The error occurs if the source is less than two characters.                                                                                            | IB                 |
| tl:businessId                 | Business party identifier is required !!!                                               | The error occurs if tl:businessPartyInfo is populated, but the source is empty or null.                                                                | IB                 |
|                               | Destroying business party ID is required !!!                                            | The error occurs if tl:businessPartyInfo is populated, but the source is empty or null.                                                                | OB                 |
| tl:businessId   <b>@type</b>  | Valid business identifier type is required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                          | IB/OB              |
|                               | Party type attribute is required when BusinessId is populated !!!                       | The error occurs if <b>tl:businessId</b> is populated, but the source is empty or null.                                                                | IB                 |
| tl:businessClassification     | Valid business classification value is required !!!                                     | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                          | IB/OB              |
| tl:businessName               | Business name of business party is required !!!                                         | The error occurs if the source is empty or null.                                                                                                       | IB/OB              |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                     | Description                                                                                         | Inbound / Outbound |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------|
| tl:street1                                                                                                                                                        | Street address of business party is required !!!                                                                                                                                                  | The error occurs if the source is empty or null.                                                    | IB/OB              |
| tl:city                                                                                                                                                           | City of business party is required !!!                                                                                                                                                            | The error occurs if the source is empty or null.                                                    | IB/OB              |
| tl:district                                                                                                                                                       | 3-digit numeric District code required for country India !!!                                                                                                                                      | The error occurs if tl:country = "IN", but the source is not a 3-digit numeric code.                | IB/OB              |
| tl:stateOrRegion                                                                                                                                                  | State or region of business party is required !!!                                                                                                                                                 | The error occurs if the source is empty or null.                                                    | IB/OB              |
| tl:country                                                                                                                                                        | Country of business party is required !!!                                                                                                                                                         | The error occurs if the source is empty or null.                                                    | IB/OB              |
| tl:warehouseOperatorName                                                                                                                                          | Warehouse operator name for China product is required !!!                                                                                                                                         | The error occurs if cmn:NumberList   cmn:Serial   @format = "CN-EDMC", but source is empty or null. | IB/OB              |
| tl:decommissionReasonCode                                                                                                                                         | Valid reason code is required !!!                                                                                                                                                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.       | IB/OB              |
| tl:destructionMethod                                                                                                                                              | Valid destruction method code is required !!!                                                                                                                                                     | The error occurs if the source is present, but there is no matching entry in the lookup file.       | IB/OB              |
| <b>Class 2</b>                                                                                                                                                    |                                                                                                                                                                                                   |                                                                                                     |                    |
| Class 2 errors are thrown in response to the Serialized Operations Manager Decommission (EPCIS v1.2) inbound message.                                             |                                                                                                                                                                                                   |                                                                                                     |                    |
| decommissionEvent                                                                                                                                                 | Required field DecommissionEvent is empty                                                                                                                                                         | The error occurs if the source is empty or null.                                                    |                    |
|                                                                                                                                                                   | More than one DecommissionEvent found                                                                                                                                                             | The error occurs if more than one source is found.                                                  |                    |
| decommissionParam                                                                                                                                                 | More than one decommissionParam found                                                                                                                                                             | The error occurs if more than one source is found.                                                  |                    |
|                                                                                                                                                                   | no decommissionParam found                                                                                                                                                                        | The error occurs if the source is empty or null.                                                    |                    |
| inFilename, origFilename, origCompanyname, origFileDate, cntrlID                                                                                                  | File <inFilename> is a potential duplicate match with file <origFilename> sent from <origFilename> received on <origFileDate>, based on both files having the same File Control Number <cntrlID>. | The error occurs if file is a duplicate.                                                            |                    |
| message                                                                                                                                                           | message body is null                                                                                                                                                                              | The error occurs if the source is empty or null.                                                    |                    |
| tl:addressObjectGUID                                                                                                                                              | AddressObjectGUID cannot be blank for Country RU.                                                                                                                                                 | The error occurs if tl:country = "RU", but the source is empty or null.                             |                    |
| tl:businessPartyInfo                                                                                                                                              | Reporting Party is required when Transactions are included in the request and products are sold in Russia                                                                                         | The error occurs if a Target Market in Product Master Data = "RU", but the source is empty or null. |                    |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                   |                                                                                                     |                    |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                   |                                                                                                     |                    |

# Decommission (SOAP)

## Decommission Request

### Guidelines

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

| Data Element           |  |  |  |  | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------|--|--|--|--|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| soapenv:Envelope       |  |  |  |  | 1...1<br>-    | -       | <b>Required.</b> SOAP Envelope root element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| soapenv:Header         |  |  |  |  | 1...1<br>-    | -       | <b>Required.</b> SOAP Message Header. Not used by TraceLink.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| soapenv:Body           |  |  |  |  | 1...1<br>-    | -       | <b>Required.</b> SOAP Message Body.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| urn:Decommission       |  |  |  |  | 1...1<br>-    | -       | <b>Required.</b> Decommission message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| DecommissionRequest    |  |  |  |  | 0...1<br>-    | -       | <b>Required.</b> The decommission request message to decommission a set of serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| DisaggregateFromParent |  |  |  |  | 0...1<br>1/*  | Boolean | <p>A flag that determines whether the system automatically disaggregates child serial numbers from the parent container, where relevant.</p> <ul style="list-style-type: none"> <li>If set to <b>true</b>, the system automatically disaggregates child serial numbers from the parent container if they are aggregated.</li> <li>If set to <b>false</b>, and the serial number to be decommissioned is aggregated to a parent container, the system returns an error. Defaults to <b>false</b>.</li> </ul> |
| SerialNumberList       |  |  |  |  | 0...1<br>-    | -       | <b>Required.</b> The list of one or more serial numbers that will be decommissioned.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| SerialNumber           |  |  |  |  | 1...*         |         | <b>Required.</b> The parent container's serial number.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| Data Element |  |  |  |  |         |            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|--|---------|------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |         | @sn        | 1...1<br>1/*  | String  | <b>Required.</b> A parent serial number. See <a href="#">Serial Number Data Examples</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |         | @namespace | 0...1<br>1/*  | String  | Not supported by TraceLink. See <a href="#">Serial Number Data Examples</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  | Sampled |            | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled.<sup>2</sup></p> <div> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> </ul> </div> |

<sup>1</sup>00008820200000047506<sup>2</sup>true



| Data Element |  |  |  |         | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|---------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |         |               |         | <ul style="list-style-type: none"> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | Damaged | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is damaged.<sup>1</sup></p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> </ul> |

<sup>1</sup>false

| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------|--|--|--|----------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |               |         | <ul style="list-style-type: none"> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                             |
|              |  |  |  | Recalled | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was recalled.<sup>1</sup></p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> </ul> |

<sup>1</sup>false

| Data Element |  |  |  |         | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|---------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |         |               |         | <ul style="list-style-type: none"> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  | Expired | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is expired.<sup>1</sup></p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> </ul>                                        |

<sup>1</sup>false

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|-----------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  | Misplaced | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was misplaced.<sup>1</sup></p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> </ul>                                                                                                                                                                                                                           |

<sup>1</sup>false

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|-----------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"> <li>• Dispensed</li> <li>• Disposed</li> <li>• Repackaged</li> <li>• SampledArchival</li> <li>• SampledByAuthorities</li> <li>• Stolen</li> <li>• Withdrawn</li> <li>• SampledCustomsControl</li> <li>• SampledFederalInspection</li> <li>• SampledClinicalStudy</li> <li>• SampledPharmaStudy</li> <li>• SampledMarketingDemo</li> <li>• SampledSelectiveControl</li> <li>• Spoilage</li> <li>• WithdrawnExperiment</li> <li>• Defective</li> <li>• InappropriatelyStored</li> <li>• Returned</li> <li>• Other</li> </ul> |
|              |  |  |  | Dispensed | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was dispensed.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• Sampled</li> <li>• Damaged</li> <li>• Recalled</li> <li>• Expired</li> </ul>                                                                                                                                                                                                                                              |

| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|----------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |               |         | <ul style="list-style-type: none"> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  | Disposed | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was disposed.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                              |

| Data Element |  |  |  |            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |            |               |         | <ul style="list-style-type: none"> <li>• Expired</li> <li>• Misplaced</li> <li>• Dispensed</li> <li>• Disposed</li> <li>• Repackaged</li> <li>• SampledArchival</li> <li>• SampledByAuthorities</li> <li>• Stolen</li> <li>• Withdrawn</li> <li>• SampledCustomsControl</li> <li>• SampledFederalInspection</li> <li>• SampledClinicalStudy</li> <li>• SampledPharmaStudy</li> <li>• SampledMarketingDemo</li> <li>• SampledSelectiveControl</li> <li>• Spoilage</li> <li>• WithdrawnExperiment</li> <li>• Defective</li> <li>• InappropriatelyStored</li> <li>• Returned</li> <li>• Other</li> </ul> |
|              |  |  |  | Repackaged | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is repackaged.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• Sampled</li> <li>• Damaged</li> </ul>                                                                                                                                                                                                                                                                                                                             |

| Data Element |  |  |  |                      | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|----------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                      |               |         | <ul style="list-style-type: none"> <li>Recalled</li> <li>Expired</li> <li>Misplaced</li> <li>Dispensed</li> <li>Disposed</li> <li>Repackaged</li> <li>SampledArchival</li> <li>SampledByAuthorities</li> <li>Stolen</li> <li>Withdrawn</li> <li>SampledCustomsControl</li> <li>SampledFederalInspection</li> <li>SampledClinicalStudy</li> <li>SampledPharmaStudy</li> <li>SampledMarketingDemo</li> <li>SampledSelectiveControl</li> <li>Spoilage</li> <li>WithdrawnExperiment</li> <li>Defective</li> <li>InappropriatelyStored</li> <li>Returned</li> <li>Other</li> </ul> |
|              |  |  |  | SampledByAuthorities | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled by authorities.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>Sampled</li> </ul>                                                                                                                                                                                                                                                                                                             |



| Data Element |  |  |  |        | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |        |               |         | <ul style="list-style-type: none"> <li>• Damaged</li> <li>• Recalled</li> <li>• Expired</li> <li>• Misplaced</li> <li>• Dispensed</li> <li>• Disposed</li> <li>• Repackaged</li> <li>• SampledArchival</li> <li>• SampledByAuthorities</li> <li>• Stolen</li> <li>• Withdrawn</li> <li>• SampledCustomsControl</li> <li>• SampledFederalInspection</li> <li>• SampledClinicalStudy</li> <li>• SampledPharmaStudy</li> <li>• SampledMarketingDemo</li> <li>• SampledSelectiveControl</li> <li>• Spoilage</li> <li>• WithdrawnExperiment</li> <li>• Defective</li> <li>• InappropriatelyStored</li> <li>• Returned</li> <li>• Other</li> </ul> |
|              |  |  |  | Stolen | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is stolen.</p> <p> One, and only one, of the following reason code elements may be set to true:</p>                                                                                                                                                                                                                                                                                                                                                                     |

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|-----------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"><li>• <b>Sampled</b></li><li>• <b>Damaged</b></li><li>• <b>Recalled</b></li><li>• <b>Expired</b></li><li>• <b>Misplaced</b></li><li>• <b>Dispensed</b></li><li>• <b>Disposed</b></li><li>• <b>Repackaged</b></li><li>• <b>SampledArchival</b></li><li>• <b>SampledByAuthorities</b></li><li>• <b>Stolen</b></li><li>• <b>Withdrawn</b></li><li>• <b>SampledCustomsControl</b></li><li>• <b>SampledFederalInspection</b></li><li>• <b>SampledClinicalStudy</b></li><li>• <b>SampledPharmaStudy</b></li><li>• <b>SampledMarketingDemo</b></li><li>• <b>SampledSelectiveControl</b></li><li>• <b>Spoilage</b></li><li>• <b>WithdrawnExperiment</b></li><li>• <b>Defective</b></li><li>• <b>InappropriatelyStored</b></li><li>• <b>Returned</b></li><li>• <b>Other</b></li></ul> |
|              |  |  |  | Withdrawn | 0...1<br>1/*  | Boolean | Item attribute set with Serial Number State and Item State indicating the item is withdrawn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Data Element |  |  |  |  | Occurs Length | Type | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|--|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |               |      | <div> One, and only one, of the following reason code elements may be set to true:</div> <ul style="list-style-type: none"><li>• <b>Sampled</b></li><li>• <b>Damaged</b></li><li>• <b>Recalled</b></li><li>• <b>Expired</b></li><li>• <b>Misplaced</b></li><li>• <b>Dispensed</b></li><li>• <b>Disposed</b></li><li>• <b>Repackaged</b></li><li>• <b>SampledArchival</b></li><li>• <b>SampledByAuthorities</b></li><li>• <b>Stolen</b></li><li>• <b>Withdrawn</b></li><li>• <b>SampledCustomsControl</b></li><li>• <b>SampledFederalInspection</b></li><li>• <b>SampledClinicalStudy</b></li><li>• <b>SampledPharmaStudy</b></li><li>• <b>SampledMarketingDemo</b></li><li>• <b>SampledSelectiveControl</b></li><li>• <b>Spoilage</b></li><li>• <b>WithdrawnExperiment</b></li><li>• <b>Defective</b></li><li>• <b>InappropriatelyStored</b></li><li>• <b>Returned</b></li><li>• <b>Other</b></li></ul> |



| Data Element |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|--------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | SampledFederalInspection | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for federal inspection.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |



| Data Element |  |  |  |                    | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                    |               |         | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for post-registration pharmaceutical study supporting submitted changes to a dossier.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> </ul> |
|              |  |  |  | SampledPharmaStudy | 0...1<br>1/*  | Boolean |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Data Element |  |  |  |                      | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|----------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                      |               |         | <ul style="list-style-type: none"> <li>Other</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | SampledMarketingDemo | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for marketing demonstration purposes.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>Sampled</li> <li>Damaged</li> <li>Recalled</li> <li>Expired</li> <li>Misplaced</li> <li>Dispensed</li> <li>Disposed</li> <li>Repackaged</li> <li>SampledArchival</li> <li>SampledByAuthorities</li> <li>Stolen</li> <li>Withdrawn</li> <li>SampledCustomsControl</li> <li>SampledFederalInspection</li> <li>SampledClinicalStudy</li> <li>SampledPharmaStudy</li> <li>SampledMarketingDemo</li> <li>SampledSelectiveControl</li> <li>Spoilage</li> <li>WithdrawnExperiment</li> <li>Defective</li> <li>InappropriatelyStored</li> </ul> |



| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|----------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |               |         | <ul style="list-style-type: none"> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | Spoilage | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is spoiled (e.g. due to heat, oxygen, moisture, microorganisms).</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> </ul> |

| Data Element |  |  |  |                     | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|---------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                     |               |         | <ul style="list-style-type: none"> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | WithdrawnExperiment | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is withdrawn from circulation of SSCC or SGTIN, piled or accumulated in the course of the experiment.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> </ul> |

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|-----------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"> <li>• Spoilage</li> <li>• WithdrawnExperiment</li> <li>• Defective</li> <li>• InappropriatelyStored</li> <li>• Returned</li> <li>• Other</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | Defective | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is defective.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• Sampled</li> <li>• Damaged</li> <li>• Recalled</li> <li>• Expired</li> <li>• Misplaced</li> <li>• Dispensed</li> <li>• Disposed</li> <li>• Repackaged</li> <li>• SampledArchival</li> <li>• SampledByAuthorities</li> <li>• Stolen</li> <li>• Withdrawn</li> <li>• SampledCustomsControl</li> <li>• SampledFederalInspection</li> <li>• SampledClinicalStudy</li> <li>• SampledPharmaStudy</li> <li>• SampledMarketingDemo</li> </ul> |

| Data Element |  |  |  |                       | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|-----------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                       |               |         | <ul style="list-style-type: none"> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | InappropriatelyStored | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was inappropriately stored.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> </ul> |

| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|----------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |               |         | <ul style="list-style-type: none"> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | Returned | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was returned.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> </ul> |

| Data Element |  |  |  |       | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|-------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |       |               |         | <ul style="list-style-type: none"> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | Other | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was decommissioned for other reasons.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> </ul> |

| Data Element |  |  |  | Occurs Length                                                                                                                                                                                                                                                                                                                                    | Type         | Description                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                                                                                                                                                                                                                                                                                                                                                  |              | <ul style="list-style-type: none"> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  | ReasonCode                                                                                                                                                                                                                                                                                                                                       | 0...1<br>-   | String                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | <p>A code that indicates the reason for the change in serial number status. <sup>1</sup></p> <p>See the <a href="#">ReasonCode</a> enumeration list for valid values.</p> <p> This is an optional field. If not specified, defaults to <b>STATUSUPDATE</b>.</p> |              |                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | EventDateTime                                                                                                                                                                                                                                                                                                                                    | 0...1<br>-   | Date                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  | <p>The date and time of the event in XSD GMT date format (YYYY-MM-DDTHH:MM:SSZ). If omitted, the system will record the current date-time. <sup>2</sup></p>                                                                                                                                                                                      |              |                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | Transactions                                                                                                                                                                                                                                                                                                                                     | 0...1<br>-   |                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | <p><b>Required.</b> The transaction identifiers associated with the decommission. If providing the Excel 2003 format of the report, this is not required.</p>                                                                                                                                                                                    |              |                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | Transaction                                                                                                                                                                                                                                                                                                                                      | 0...*<br>1/* | String                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | <p><b>Required.</b> The list of one or more transaction identifiers associated with the decommission event.</p>                                                                                                                                                                                                                                  |              |                                                                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  | ItemID                                                                                                                                                                                                                                                                                                                                           | 0...1<br>1/* | String                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  | <p><b>Conditionally required</b> for Turkey. The transaction identifier associated with decommissioning. <sup>3</sup></p>                                                                                                                                                                                                                        |              |                                                                                                                                                                                                                                                                                                                                                                                               |

<sup>1</sup>STATUSUPDATE<sup>2</sup>2015-06-01T17:10:16Z<sup>3</sup>100250

| Data Element |  |  |  |                          |                  |          | Occurs Length | Type    | Description                                                                                                                                                                                                           |
|--------------|--|--|--|--------------------------|------------------|----------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                          |                  | ItemType | 0...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type using the supported enumeration values (e.g. <a href="#">DESTRUCTION</a> ). <sup>1</sup><br>See the <a href="#">TransactionId</a> enumeration list for valid values. |
|              |  |  |  |                          |                  | Date     | 0...1<br>1/*  | String  | <b>Required.</b> The date of the transaction in XML YYYY-MM-DD format. This value is used for regulatory reporting of the transaction date. <sup>2</sup>                                                              |
|              |  |  |  | ReasonDescription        |                  |          | 0...1<br>1/*  | String  | <b>Conditionally required</b> for Turkey (where the limit is 100 characters and the value must be in Turkish). The reason for the destruction. <sup>3</sup>                                                           |
|              |  |  |  | DestructionMethod        |                  |          | 0...1<br>1/*  | String  | <b>Required.</b> The method of product destruction. <sup>4</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                      |
|              |  |  |  | LongRunningRestSupport   |                  |          | -<br>-        | Boolean | Not used.                                                                                                                                                                                                             |
|              |  |  |  | ReportingPartyIdentifier |                  |          | 0...1<br>-    | -       | <b>Required.</b> The identifier of the business party that will be reporting the event to the government. <sup>5</sup>                                                                                                |
|              |  |  |  |                          | @identiertype    |          | 0...1<br>1/*  | String  | <b>Required.</b> Indicates the reporting business party identifier type. <sup>6</sup><br>See the <a href="#">IdentifierType</a> enumeration list for valid values.                                                    |
|              |  |  |  |                          | @identifiervalue |          | 0...1<br>1/*  | String  | <b>Required.</b> Indicates the identifier value of the reporting business party. <sup>7</sup>                                                                                                                         |
|              |  |  |  | MarketCountryCode        |                  |          | 0...1<br>2/3  | String  | The country, using the standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>8</sup>                                                                                                |
|              |  |  |  | LocationType             |                  |          | 0...1<br>1/*  | String  | The type of location where the event occurred. See the <a href="#">LocationId</a> enumeration list for valid values.                                                                                                  |
|              |  |  |  | Location                 |                  |          | 0...1         | String  | <b>Required.</b> The site-level location identifier where the event occurred. This element defaults to the company level if no location is provided. <sup>9</sup>                                                     |

<sup>1</sup>DESTRUCTION<sup>2</sup>2015-06-01<sup>3</sup>Damaged goods in the warehouse.<sup>4</sup>INCINERATION<sup>5</sup>8888882028677<sup>6</sup>DEA<sup>7</sup>123456789<sup>8</sup>TR<sup>9</sup>8888882.02867.0



| Data Element |  |  |  |  | Occurs Length | Type | Description                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |               |      |  In most cases, this value is an SGLN, the format for which must be the numeric component only, with the urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events). |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:Decommission>
      <DecommissionRequest>
        <DisaggregateFromParent>true</DisaggregateFromParent>
        <SerialNumberList>
          <SerialNumber sn="00008820200000047506" namespace="?"/>
        </SerialNumberList>
        <Sampled>false</Sampled>
        <Damaged>false</Damaged>
        <Recalled>false</Recalled>
        <Expired>false</Expired>
        <MarketReleased>false</MarketReleased>
        <Misplaced>false</Misplaced>
        <Dispensed>false</Dispensed>
        <Disposed>false</Disposed>
        <Repackaged>false</Repackaged>
        <SampledByAuthorities>false</SampledByAuthorities>
        <Stolen>false</Stolen>
        <Withdrawn>false</Withdrawn>
        <SampledArchival>false</SampledArchival>
        <SampledCustomsControl>false</SampledCustomsControl>
        <SampledFederalInspection>false</SampledFederalInspection>
        <SampledClinicalStudy>false</SampledClinicalStudy>
        <SampledPharmaStudy>false</SampledPharmaStudy>
        <SampledMarketingDemo>false</SampledMarketingDemo>
        <SampledSelectiveControl>false</SampledSelectiveControl>
        <Spoilage>false</Spoilage>
        <WithdrawnExperiment>false</WithdrawnExperiment>
      </DecommissionRequest>
    </urn:Decommission>
  </soapenv:Body>
</soapenv:Envelope>
```

```

    <Defective>false</Defective>
    <InappropriatelyStored>false</InappropriatelyStored>
    <Returned>false</Returned>
    <Other>false</Other>
    <ReasonCode>STATUSUPDATE</ReasonCode>
    <EventDateTime>2015-06-01T17:10:16Z</EventDateTime>
    <Transactions>
      <Transaction>
        <ItemID>100250</ItemID>
        <ItemType>DESTRUCTION</ItemType>
        <Date>2015-06-01</Date>
      </Transaction>
    </Transactions>
    <ReasonDescription>Depoda Hasarlı mallar</ReasonDescription>
    <ReportingPartyIdentifier identiifiertype="COMPANYID" identiifiervalue="8888882028677"/>
    <MarketCountryCode>TR</MarketCountryCode>
    <LocationType>SGLN</LocationType>
    <Location>8888882.02867.0</Location>
  </DecommissionRequest>
</urn:Decommission>
</soapenv:Body>
</soapenv:Envelope>

```

## Errors

| Exception Code                  | Exception Message                                                                                                                                                                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BADAGGREGATESTATE               | Operation could not be performed because serial number <serial number> and serial number <parent serial number> are currently in different states, or the operation would result in them having different states. Parent and child serial numbers are not permitted to be in different states. |
| CANNOTBEAGGREGATED              | Operation could not be performed because serial number <serial number> is aggregated to container <parent serial number>.                                                                                                                                                                      |
| CROSSLOCATIONS                  | Operation cannot be performed against serial numbers in multiple locations.                                                                                                                                                                                                                    |
| EVENTTIMEAFTERNOW               | Event time stamp must not be in the future.                                                                                                                                                                                                                                                    |
| EVENTTIMEBEFORELASTEVENT        | Event time stamp is earlier than the last event for serial number <serial number>.                                                                                                                                                                                                             |
| MLTUPLE_ATTRIBUTES_DECOMMISSION | The serial number(s) could not be decommissioned. The Decommission API request may only specify a single reason code.                                                                                                                                                                          |

| Exception Code          | Exception Message                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------|
| NEVERCOMMISSIONED       | Serial number <serial number> was never commissioned.                                                      |
| NOSOMSERVICE            | No Serialized Operations Manager service found.                                                            |
| NOTCOMMISSIONED         | Serial number <serial number> is not commissioned.                                                         |
| NOTCOMMISSIONEDLOCATION | Serial Number <serial number> was not commissioned at this location.                                       |
| NOTVALIDLOCATION        | Location <location identifier> was not valid for serial number <serial number>.                            |
| SNNOTFOUND              | Serial number <serial number> does not exist.                                                              |
| SOMDUPLICATESNS         | The following serial numbers were listed more than once: <serial number>.                                  |
| VALIDATION              | Destruction Method is required for products sold in Russia.                                                |
|                         | Item Attribute is required for products sold in Russia.                                                    |
|                         | Location is required for products sold in Russia.                                                          |
|                         | Reporting Party is required when Transactions are included in the request and products are sold in Russia. |
|                         | The parameter <field name> is missing or had an invalid value.                                             |
|                         | Transaction Identifier for 'Removal from Circulation' is required for products sold in Russia.             |

## Decommission Response

### Guidelines

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

The following fields are included in the message response:

| Data Element | Occurs Length | Type | Description                                  |
|--------------|---------------|------|----------------------------------------------|
| S:Envelope   | 1...1         | -    | <b>Required.</b> SOAP Envelope root element. |

| Data Element |        |                          |            |                 |                  | Occurs Length | Type      | Description                                                                                                    |
|--------------|--------|--------------------------|------------|-----------------|------------------|---------------|-----------|----------------------------------------------------------------------------------------------------------------|
|              | S:Body |                          |            |                 |                  | 1..1<br>-     | -         | <b>Required.</b> SOAP Message Body.                                                                            |
|              |        | ns2:DecommissionResponse |            |                 |                  | 1..1<br>-     | -         | <b>Required.</b> Decommission response message.                                                                |
|              |        |                          | TLResponse |                 |                  | 0..1<br>-     | -         | <b>Required.</b> TraceLink response message.                                                                   |
|              |        |                          |            | Success         |                  |               | 0..1<br>- | <b>Required.</b> Indicates if the decommission request successfully processed. <sup>1</sup>                    |
|              |        |                          |            | ExceptionReturn |                  |               | 0..1<br>- | <b>Conditionally required</b> if <b>Success</b> = <b>false</b> ; omitted otherwise. Error information.         |
|              |        |                          |            | CallException   |                  |               | 1..*<br>- | <b>Required.</b> Error details including the exception code and error message, if available.                   |
|              |        |                          |            |                 | ExceptionCode    | 0..1<br>0/*   | String    | <b>Required.</b> Error code.                                                                                   |
|              |        |                          |            |                 | ExceptionMessage | 0..1<br>0/*   | String    | <b>Conditionally required</b> if error condition is available. Message that further describes error condition. |

## Example

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:DecommissionResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns2:AggregateResponse>
  </S:Body>
</S:Envelope>

```

<sup>1</sup>true

# ESM Destroy (EPCIS v1.2)

## Guidelines

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:** SOM\_ESM\_DESTROY

**Info Exchange Display Name:** ESM Destroy

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

⚠ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.100000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        |  | Occurs Length | Type     | Description                                                                                                                                  |
|---------------------|--|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------|
| epcis:EPCISDocument |  | 1...1<br>-    | -        | <b>Required.</b> EPCIS message root element.                                                                                                 |
| @schemaVersion      |  | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must equal <a href="#">1.2</a> . <sup>1</sup> |
| @creationDate       |  | 1...1<br>1/*  | DateTime | <b>Required.</b> Date the message was created in YYYY-MM-DDTHH:MM:SS:mmZ format. <sup>2</sup>                                                |

<sup>1</sup>1.2

<sup>2</sup>2017-01-30T08:30:21.32Z

| Data Element                        |  |  |  |  | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------|--|--|--|--|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPCISHeader                         |  |  |  |  | 0...1<br>–    | -      | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| sbdh:StandardBusinessDocumentHeader |  |  |  |  | 1...1<br>–    | -      | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information, along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| sbdh:HeaderVersion                  |  |  |  |  | 1...1<br>0/*  | String | <b>Required.</b> Version of the Standard Business Document Header (SBDH). The <b>HeaderVersion</b> must be set to <a href="#">1.0</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| sbdh:Sender                         |  |  |  |  | 1...*<br>–    | -      | <b>Required.</b> A unique identification key for the <b>Sender</b> party of the message, representing the organization that created the standard business document. The <b>Sender</b> element must be used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                                     |
| sbdh:Identifier                     |  |  |  |  | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>2</sup></p> <p>Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:088202.867701.0</a></li> <li><a href="#">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <div>  GLNs do not have an urn/http prefix.         </div> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
| @Authority                          |  |  |  |  | 1...1<br>1/*  | String | <p><b>Required.</b> The sender identifier type. The <b>Authority</b> was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. An update made in December 2016 changed this to accept additional values.<sup>3</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                                |
| sbdh:Receiver                       |  |  |  |  | 1...*<br>–    | -      | <b>Required.</b> Indicates a unique identification key for the direct <b>Receiver</b> party of the message, representing the organization that receives the standard business document. The <b>Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                                                                    |
| sbdh:Identifier                     |  |  |  |  | 1...1<br>1/*  | String | <p><b>Required.</b> The value of the Identifier element may be a GLN, SGLN, or any other supported business party type.<sup>4</sup></p> <p>Send SGLN and all other party types with the GS1-conformant uri prefix, for example:</p> <ul style="list-style-type: none"> <li><a href="#">urn:epc:id:sgln:088202.867701.0</a></li> </ul>                                                                                                                                                                                                                                                                                                           |

<sup>1</sup>1.0<sup>2</sup>8888882028677<sup>3</sup>GLN<sup>4</sup>8888882028655

| Data Element |  |  |                             |                          | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|-----------------------------|--------------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |                             |                          |               |          | <ul style="list-style-type: none"> <li><a href="http://epcis.gs1us.org/hc/dea/loc/10023141">http://epcis.gs1us.org/hc/dea/loc/10023141</a></li> </ul> <div>  GLNs do not have an urn/http prefix.         </div> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |                             | @Authority               | 1...1<br>1/*  | String   | <b>Required.</b> This attribute defines the receiver identifier type. The Authority was previously expected to be set to <a href="#">GLN</a> for GS1 XML messages. Update made in December 2016 changed this to take additional values. <sup>1</sup> See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.                                                            |
|              |  |  | sbdh:DocumentIdentification |                          | 1...1<br>-    | -        | <b>Required.</b> Contains the identification group for the message.                                                                                                                                                                                                                                                                                                                         |
|              |  |  |                             | sbdh:Standard            | 1...1<br>0/*  | String   | <b>Required.</b> Name of the document standard contained in the file or message. The standard value for this field is <a href="#">EPCglobal</a> . <sup>2</sup>                                                                                                                                                                                                                              |
|              |  |  |                             | sbdh:TypeVersion         | 1...1<br>0/*  | String   | <b>Required.</b> Reflects the version of the document included. This is the complete version of the document itself and is different from the <b>HeaderVersion</b> as these are hard-coded values. The <b>TypeVersion</b> is set to <a href="#">1.0</a> . <sup>3</sup>                                                                                                                      |
|              |  |  |                             | sbdh:InstanceIdentifier  | 1...1<br>1/*  | String   | <b>Required.</b> Reference information that uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This identifier confirms this document as being distinct from others. <sup>4</sup>                                                                                                                                                     |
|              |  |  |                             | sbdh:Type                | 1...1<br>0/*  | String   | <b>Required.</b> Identifies the document type. The <b>Type</b> value is set to <a href="#">Events</a> for a shipment event. <sup>5</sup>                                                                                                                                                                                                                                                    |
|              |  |  |                             | sbdh:CreationDateAndTime | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <a href="#">Z</a> to be appended; however, if it is not included, the system assumes that the time is GMT and therefore appends the <a href="#">Z</a> . <sup>6</sup>                                                                             |
|              |  |  | EPCISBody                   |                          | 1...1<br>-    | -        | <b>Required.</b> Contains all of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                         |
|              |  |  | EventList                   |                          | 1...1         | -        | <b>Required.</b> The <b>ObjectEvent</b> for destroying events is the only event expected in the <b>EventList</b> .                                                                                                                                                                                                                                                                          |

<sup>1</sup>GLN<sup>2</sup>EPCglobal<sup>3</sup>1.0<sup>4</sup>000001<sup>5</sup>Events<sup>6</sup>2017-01-30T08:30:21.32Z

| Data Element |  |  |                     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|---------------------|---------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | ObjectEvent         | 1...*<br>-    | -        | <b>Required.</b> The <b>ObjectEvent</b> describing destroying events.<br><b>EventList = ObjectEventDestroying</b> when : <ul style="list-style-type: none"> <li>• <b>action</b> = <b>DELETE</b></li> <li>• <b>bizStep</b> = <b>urn:epcglobal:cbv:bizstep:destroying</b></li> <li>• <b>disposition</b> = <b>urn:epcglobal:cbv:disp:destroyed</b></li> </ul>                      |
|              |  |  | eventTime           | 1...1<br>1/*  | DateTime | <b>Required.</b> The time stamp of the date/time when the event occurred in YYYY-MM-DDTHH:MM:SS.mm or YYYY-MM-DDTHH:MM:SS.mmm format. Must include a time zone indicator as specified in Section 9.5 of [EPCIS1.0.1]. The system expects the Z to be appended if it is not included; however, the system assumes that the time is GMT and therefore appends the Z. <sup>1</sup> |
|              |  |  | eventTimeZoneOffset | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for eventTime. A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time, whether it is standard time or Daylight saving time. Per Section 7.2.8 of [EPCIS1.0.1]. <sup>2</sup>            |
|              |  |  | epcList             | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each item, case, and/or pallet destroyed.                                                                                                                                                                                                                                                                                                          |
|              |  |  | epc                 | 1...*<br>1/*  | String   | <b>Required.</b> The EPC identifier in EPC Pure Identity URI format. See <a href="#">EPC Pure Identifier Format Examples</a> . <sup>3</sup>                                                                                                                                                                                                                                     |
|              |  |  | action              | 1...1<br>0/*  | String   | <b>Required.</b> The <b>action</b> value must equal <b>DELETE</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                |
|              |  |  | bizStep             | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>bizStep</b> value must equal <b>urn:epcglobal:cbv:bizstep:destroying</b> . <sup>5</sup>                                                                                                                                                                                                                                                                 |
|              |  |  | disposition         | 0...1<br>0/*  | AnyURI   | <b>Required.</b> The <b>disposition</b> value must equal <b>urn:epcglobal:cbv:disp:destroyed</b> . <sup>6</sup>                                                                                                                                                                                                                                                                 |
|              |  |  | readPoint           | 0...1         | -        | <b>Required.</b> Location where the event occurs. Define using the GS1-conformant party identifier types with full                                                                                                                                                                                                                                                              |

<sup>1</sup>2017-01-30T08:30:21.32Z<sup>2</sup>-04:00<sup>3</sup>urn:epc:id:sscc:030944.10105363280<sup>4</sup>DELETE<sup>5</sup>urn:epcglobal:cbv:bizstep:destroying<sup>6</sup>urn:epcglobal:cbv:disp:destroyed



| Data Element |  |  |  |                    | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|--------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                    |               |        | urn or http prefix. SGLN is strongly preferred, but other party types are supported. Links to location party address data if present in VocabularyElement   @id.                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | id                 | 1...1<br>0/*  | AnyURI | <b>Required.</b> The party identifier of the location where the destroying event occurs. SGLN is strongly preferred for GS1-conformance, but other party identifiers are also supported. This may be a site-level SGLN, or a finer-grain location identifier. <sup>1</sup><br>This location identifier links to VocabularyElement   @id if location address information is present in the <b>EPCISMasterData</b> header extension.<br>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values. |
|              |  |  |  | bizLocation        | 0...1<br>-    | -      | The business location of the message sender who executes the event. Not used for a destroying event.                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | id                 | 1...1<br>1/*  | AnyURI | The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN, or a finer-grain location identifier.                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | bizTransactionList | 0...1<br>-    | -      | Business transaction list group.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  | bizTransaction     | 1...*<br>0/*  | AnyURI | The transaction identifier associated with the decommissioned product. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | @type              | 1...1<br>1/*  | String | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul>                                                                                                   |
|              |  |  |  | @date              | 0...1<br>0/*  | Date   | Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | tl:locationId      | 0...1<br>0/*  | String | Serialized Operations Manager External Subscriber Location identifier. When messages are submitted by an external Serialized Operations Manager subscriber, the system uses the subscriber company integration user to perform the action and log this in the audit trail so that all transactions executed by the external                                                                                                                                                                                            |

<sup>1</sup>urn:epc:id:sgln:0614141.12345.1400<sup>2</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016<sup>3</sup>2019-04-01

| Data Element |  |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|--|---------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                           |               |         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b> The location types. <sup>2</sup><br>See the <a href="#">MessagePartyIDType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:destroyEventExtensions | 1...1<br>-    | -       | <b>Required.</b> Extensions used for <b>ObjectEvent</b> Destroying.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | tl:transactionDate        | 0...1<br>0/*  | Date    | Date associated with the business message document in bizTransactionList in XML date format YYYY-MM-DD. This date may or may not be the same as the <b>eventTime</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | tl:disaggregateFromParent | 0...1<br>-    | Boolean | Valid values: <sup>4</sup> <ul style="list-style-type: none"> <li><b>true</b> - instructs backend to disaggregate a serial number from its parent container (if aggregated) when setting the <b>PackagingSerialNumberStatus</b> of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b>.</li> <li><b>false</b> - instructs backend to operate in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container.</li> </ul> <div> <i>i</i> If source is not populated, target will default to <b>false</b>.         </div> |
|              |  |  |  |  | tl:marketCountryCode      | 0...1<br>0/2  | String  | Market country code. <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | tl:businessPartyInfo      | 0...1<br>-    | -       | <b>Required.</b> The full business information (e.g. business type, contact information) associated with the authorizing party that destroyed the serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  | tl:businessId             | 1...*<br>1/*  | String  | <b>Required.</b> The identifier associated with the authorizing party. <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |  |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b> The type of the <b>BusinessId</b> identifier. <sup>7</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>8888882028677<sup>2</sup>GLN<sup>3</sup>2017-01-30<sup>4</sup>false<sup>5</sup>US<sup>6</sup>8888882028677<sup>7</sup>GLN

| Data Element |  |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--|--|---------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |                           |               |        | <div>  Only one of the following values may be used per message: <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> </div> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p> |
|              |  |  |  |  |  | tl:businessClassification | 0...1<br>0/*  | String | Business classification.<br>See the <a href="#">BusinessClassification</a> enumeration list for valid values.                                                                                                                                                                                                                                                                 |
|              |  |  |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -      | The business name and address of the authorizing business entity.                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  |  | tl:businessName           | 1...1<br>1/*  | String | <b>Required.</b> Business name of the entity that authorizes the destruction of the serial numbers. <sup>1</sup>                                                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:street1                | 1...1<br>1/*  | String | <b>Required.</b> The first line of the street address. <sup>2</sup>                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:street2                | 0...1<br>0/*  | String | The second line of the street address. <sup>3</sup>                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:city                   | 1...1<br>1/*  | String | <b>Required.</b> The city. <sup>4</sup>                                                                                                                                                                                                                                                                                                                                       |
|              |  |  |  |  |  | tl:village                | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:houseNumber            | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> .                                                                                                                                   |
|              |  |  |  |  |  | tl:township               | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                                                                                                         |

<sup>1</sup>Kendal Pharma<sup>2</sup>300 Trade Center<sup>3</sup>Suite 7690<sup>4</sup>Woburn

| Data Element |  |  |  |  |  |                        | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|--|------------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:district            | 0...1<br>0/*  | String | <p><b>Conditionally required</b> for India. District Code only for India.<sup>1</sup></p> <p> Must be a 3-digit numeric code.</p>                                                         |
|              |  |  |  |  |  | tl:stateOrRegion       | 1...1<br>1/*  | String | <b>Required.</b> The state, province, or region using the standard two-letter abbreviation specified in ISO 3166-2:1998 country subdivision code <sup>2</sup>                                                                                                                |
|              |  |  |  |  |  | tl:postalCode          | 0...1<br>1/*  | String | The ZIP or other postal code. <sup>3</sup>                                                                                                                                                                                                                                   |
|              |  |  |  |  |  | tl:country             | 1...1<br>1/*  | String | <p><b>Required.</b> The country using the standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code.<sup>4</sup></p> <p>See the <a href="#">ISOCountryCode</a> enumeration list for valid values.</p>                                                |
|              |  |  |  |  |  | tl:corporateFax        | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:addressObjectGUID   | 0...1<br>0/*  | String | <p>The global identifier assigned by Russian Federation Information Address System (FIAS). <sup>5</sup></p> <p> Maximum 36 characters, using the digits 0-9 and letters A-F</p>           |
|              |  |  |  |  |  | tl:houseGUID           | 0...1<br>0/*  | String | <p>The global House identifier assigned by the Russian Federation Information Address System (FIAS). <sup>6</sup></p> <p> Maximum 36 characters, using the digits 0-9 and letters A-F</p> |
|              |  |  |  |  |  | tl:taxRegistrationCode | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                                                                                                       |
|              |  |  |  |  |  | tl:premisesCode        | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                        |

<sup>1</sup>123<sup>2</sup>MA<sup>3</sup>01801<sup>4</sup>US<sup>5</sup>19406454-0022-000C-00B0-000000000152<sup>6</sup>19606494-0022-000A-0067-000000001259

| Data Element |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                     |
|--------------|--|--|--|---------------------------|---------------|--------|---------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | tl:warehouseOperatorName  | 0...1<br>0/*  | String | <b>Conditionally required</b> for China. Name of the person responsible for warehouse operations. <sup>1</sup>                  |
|              |  |  |  | tl:decommissionReasonCode | 0...1<br>0/*  | String | Reason code for decommission. <sup>2</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values. |
|              |  |  |  | tl:reasonDescription      | 0...1<br>0/*  | String | The reason the product was decommissioned. <sup>3</sup>                                                                         |
|              |  |  |  | tl:destructionMethod      | 0...1<br>0/*  | String | Method of destruction. <sup>4</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.             |

## Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<epcis:EPCISDocument xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
  xmlns:epcglobal="urn:epcglobal:xsd:1" schemaVersion="1.2" creationDate="2017-01-30T08:30:21Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">81100001014507</sbdh:Identifier>
      </sbdh:Sender>
      <sbdh:Receiver>
        <sbdh:Identifier Authority="GLN">0614141123452</sbdh:Identifier>
      </sbdh:Receiver>
      <sbdh:DocumentIdentification>
        <sbdh:Standard>EPCglobal</sbdh:Standard>
        <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
        <sbdh:InstanceIdentifier>2017013006310032</sbdh:InstanceIdentifier>
        <sbdh:Type>Events</sbdh:Type>
      </sbdh:DocumentIdentification>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>John Smith

<sup>2</sup>DAMAGED

<sup>3</sup>Damaged from production

<sup>4</sup>LIQUID\_DILUTION\_DRAINAGE

```

        <sbdh:CreationDateAndTime>2017-01-30T08:30:21Z</sbdh:CreationDateAndTime>
    </sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
    <EventList>
        <ObjectEvent>
            <eventTime>2017-01-30T08:30:21Z</eventTime>
            <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
            <epcList>
                <epc>urn:epc:id:sgtin:068202.0401034.11220207026272</epc>
                <epc>urn:epc:id:sgtin:068202.0401034.15870395191309</epc>
                <epc>urn:epc:id:sgtin:068202.5401034.40000000000019</epc>
            </epcList>
            <action>DELETE</action>
            <bizStep>urn:epcglobal:cbv:bizstep:destroying</bizStep>
            <disposition>urn:epcglobal:cbv:disp:destroyed</disposition>
            <readPoint>
                <id>urn:epc:id:sgln:8888882.02867.0</id>
            </readPoint>
            <bizTransactionList>
                <bizTransaction type="http://epcis.tracelink.com/hc/btt/removal" date="2019-04-
01">123456789</bizTransaction>
            </bizTransactionList>
            <tl:locationId type="GLN">8888882028677</tl:locationId>
            <tl:destroyEventExtensions>
                <tl:transactionDate>2017-01-30</tl:transactionDate>
                <tl:disaggregateFromParent>false</tl:disaggregateFromParent>
                <tl:marketCountryCode>US</tl:marketCountryCode>
                <tl:businessPartyInfo>
                    <tl:businessId type="SGLN">088202.867777.0</tl:businessId>
                    <tl:businessClassification>DISTRIBUTOR</tl:businessClassification>
                    <tl:BusinessPartyDetail>
                        <tl:businessName>Russia Pharma</tl:businessName>
                        <tl:street1>Bolshoy Devyatinsky Lane 8</tl:street1>
                        <tl:city>Moskva</tl:city>
                        <tl:stateOrRegion>Presnensky</tl:stateOrRegion>
                        <tl:postalCode>121099</tl:postalCode>
                        <tl:country>RU</tl:country>
                        <tl:addressObjectGUID>19406454-0022-000C-00B0-000000000152</tl:addressObjectGUID>
                    </tl:BusinessPartyDetail>
                </tl:businessPartyInfo>
            </tl:destroyEventExtensions>
        </ObjectEvent>
    </EventList>
</EPCISBody>
</EPCIS>

```

```

        <tl:houseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</tl:houseGUID>
    </tl:BusinessPartyDetail>
</tl:businessPartyInfo>
<tl:warehouseOperatorName>Sergei Smith</tl:warehouseOperatorName>
<tl:decommissionReasonCode>DEFECTIVE</tl:decommissionReasonCode>
<tl:reasonDescription>Defect from production</tl:reasonDescription>
<tl:destructionMethod>INCINERATION</tl:destructionMethod>
</tl:destroyEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                 | Error Message                                                               | Description                                                                                                                                     |
|----------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Class 1                                      |                                                                             |                                                                                                                                                 |
| action                                       | Action DELETE is required for destroying !!!                                | The error occurs if the source does not equal "DELETE".                                                                                         |
| bizStep                                      | bizStep urn:epcglobal:cbv:bizstep:destroying is required for destroying !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:destroying".                                                           |
| bizTransaction   @type                       | Valid bizTransaction type is required if bizTransaction is populated !!!    | The error occurs if bizTransaction is present and the source is empty or null, or if the source is not a valid value from the enumeration list. |
| disposition                                  | Disposition urn:epcglobal:cbv:disp:destroyed is required for destroying !!! | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:destroyed".                                                               |
| epc                                          | Invalid EPC format !!!                                                      | The error occurs if the source value could not be translated.                                                                                   |
|                                              | Serial number in source epc is required !!!                                 | The error occurs if the source is empty or null.                                                                                                |
| locationId   @type                           | Location identifier type is required if location ID is populated !!!        | The error occurs if locationId is populated, but the source is empty or null.                                                                   |
| locationId   @type                           | Valid Location identifier type is required !!!                              | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                   |
| ObjectEvent                                  | ObjectEvent is required for destroying !!!                                  | The error occurs if the source is empty or null.                                                                                                |
| readPoint   id                               | Source read point ID is required !!!                                        | The error occurs if the source is empty or null.                                                                                                |
| sbdh:Receiver   sbdh:Identifier   @Authority | Valid Receiver/Identifier Authority is required !!!                         | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                   |

| Data Element                                                                                                                                                      | Error Message                                                                                             | Description                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| sbdh:Sender   sbdh:Identifier   @Authority                                                                                                                        | Valid Sender/Identifier Authority is required !!!                                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| tl:businessClassification                                                                                                                                         | Valid business classification value is required !!!                                                       | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| tl:businessId                                                                                                                                                     | Business party identifier is required !!!                                                                 | The error occurs if the source is empty or null.                                                         |
| tl:businessId   @type                                                                                                                                             | Valid business identifier type is required !!!                                                            | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
|                                                                                                                                                                   | Party type attribute is required when BusinessId is populated !!!!                                        | The error occurs if the source is empty or null.                                                         |
| tl:businessName                                                                                                                                                   | Transfer from business party name is required !!!                                                         | The error occurs if the source is empty or null.                                                         |
| tl:city                                                                                                                                                           | Transfer from business party city is required !!!                                                         | The error occurs if the source is empty or null.                                                         |
| tl:country                                                                                                                                                        | Transfer from business party country is required !!!                                                      | The error occurs if the source is empty or null.                                                         |
| tl:decommissionReasonCode                                                                                                                                         | Valid reason code is required !!!                                                                         | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| tl:destructionMethod                                                                                                                                              | Valid destruction method code is required !!!                                                             | The error occurs if the source is present, but there is no matching entry in the lookup file.            |
| tl:district                                                                                                                                                       | 3-digit numeric District code required for country India !!!                                              | The error occurs if Country = "IN", but the source is not a 3 character numeric code.                    |
| tl:marketCountryCode                                                                                                                                              | Market Country Code must be at least two characters !!!                                                   | The error occurs if the source is present but is less than 2 characters.                                 |
| tl:stateOrRegion                                                                                                                                                  | Transfer from business party state or region is required !!!                                              | The error occurs if the source is empty or null.                                                         |
| tl:street1                                                                                                                                                        | Transfer from business party street address is required !!!                                               | The error occurs if the source is empty or null.                                                         |
| tl:warehouseOperatorName                                                                                                                                          | Warehouse operator name for China product is required !!!                                                 | The error occurs if epc = "http://epcis.tracelink.com/hc/cn-edmc/obj/", but the source is empty or null. |
| Class 2                                                                                                                                                           |                                                                                                           |                                                                                                          |
| tl:addressObjectGUID                                                                                                                                              | AddressObjectGUID cannot be blank for Country RU                                                          | The error occurs if tl:country = "RU", but the source is empty or null.                                  |
| tl:businessPartyInfo                                                                                                                                              | Reporting Party is required when Transactions are included in the request and products are sold in Russia | The error occurs if a Target Market in Product Master Data = "RU", but the source is empty or null.      |
| Class 3                                                                                                                                                           |                                                                                                           |                                                                                                          |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                           |                                                                                                          |



# Destroy Event (EPCIS v1.2)

## Guidelines

CMOs and 3PLs use this message to decommission serial numbers on behalf of the product's MAH who owns Serialized Operations Manager. The event data uses the GS1 EPCIS format with extensions in the TraceLink namespace for additional decommission data elements that provide business and regulatory information.

This message uses the Park and Retry functionality. If a prerequisite condition for this message has not been met, TraceLink stops processing the task, returns the task to the queue, and then tries to process the task again every 15 minutes for up to 2 hours.

**Message Type:**snd SOM\_DESTROY\_EVENT

**Info Exchange Display Name:** Destroy Event

ⓘ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

ⓘ NTINs *must* follow the [GS1 Guidance](#) standards as found on the GS1 website.

- Ex: urn:epc:id:sgtin:415001647778.0.1000000000022
- Format: urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]

Information regarding NTINs cannot be exchanged with trade partners unless the specific format outlined above is followed. If using an NTIN without following this format, an outbound error occurs when passing data from TraceLink to a trade partner.

| Data Element        | Occurs Length | Type | Description                                                                                |
|---------------------|---------------|------|--------------------------------------------------------------------------------------------|
| epcis:EPCISDocument | 1...1<br>-    | -    | <b>Required.</b> The <b>EPCISDocument</b> element contains the EPCIS message root element. |

| Data Element |                                     |  |                    |                 |            | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|-------------------------------------|--|--------------------|-----------------|------------|---------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | @schemaVersion                      |  |                    |                 |            | 1...1<br>0/*  | Decimal  | <b>Required.</b> The version of the EPCIS schema used to populate the EPCIS document elements. Must be 1.2. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              | @creationDate                       |  |                    |                 |            | 1...1<br>1/*  | DateTime | <b>Required.</b> The date that the message was created in XML DateTime format YYYY-MM-DDTHH:MM:SS:mmZ. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              | EPCISHeader                         |  |                    |                 |            | 1...1<br>-    | -        | <b>Required.</b> The XML file control header.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | sbdh:StandardBusinessDocumentHeader |  |                    |                 |            | 1...1<br>-    | -        | <b>Required.</b> Business header information including EPCIS Header Version, Sender, and Receiver information along with the document identification.                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              |                                     |  | sbdh:HeaderVersion |                 |            | 1...1<br>0/*  | String   | <b>Required.</b> The version of the Standard Business Document Header (SBDH). The <b>sbdh:HeaderVersion</b> is set to 1.0. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |                                     |  | sbdh:Sender        |                 |            | 1...*<br>-    | -        | <b>Required.</b> A unique identification key for the Sender party of the message, representing the organization which created the standard business document. The <b>sbdh:Sender</b> element must only be used once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                   |
|              |                                     |  |                    | sbdh:Identifier |            | 1...1<br>1/*  | String   | <p><b>Required.</b> A GLN, SGLN, or any other supported business party type.<sup>4</sup></p> <p>SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li>urn:epc:id:sgln:088202.867701.0</li> <li>http://epcis.gs1us.org/hc/dea/loc/10023141</li> </ul> <div>  GLN will not have a urn/http prefix.         </div> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |                                     |  |                    |                 | @Authority | 1...1<br>1/*  | String   | <p><b>Required.</b> The Authority was previously expected to be set to GLN for GS1 XML messages. Update made in December 2016 changed this to take additional values.<sup>5</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                     |

<sup>1</sup>1.2<sup>2</sup>2017-02-28T19:12:53:34Z<sup>3</sup>1.0<sup>4</sup>1100001014507<sup>5</sup>GLN

| Data Element |  |  |                             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|-----------------------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  | sbdh:Receiver               | 1...*<br>-    | -      | <b>Required.</b> A unique identification key for the direct Receiver party of the message, representing the organization which receives the standard business document. The <b>sbdh:Receiver</b> element is used only once with GS1 XML messages.                                                                                                                                                                                                                                                                                                                                            |
|              |  |  | sbdh:Identifier             | 1...1<br>1/*  | String | <p><b>Required.</b> A GLN, SGLN, or any other supported business party type.<sup>1</sup></p> <p>SGLN and all other party types should be sent with a GS1-conformant uri prefix. For example:</p> <ul style="list-style-type: none"> <li>• <code>urn:epc:id:sgln:088202.867701.0</code></li> <li>• <code>http://epcis.gs1us.org/hc/dea/loc/10023141</code></li> </ul> <p> GLN will not have a urn/http prefix.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  | @Authority                  | 1...1<br>1/*  | String | <p><b>Required.</b> The <b>Authority</b> was previously expected to be set to <b>GLN</b> for GS1 XML messages. Update made in December 2016 changed this to take additional values.<sup>2</sup></p> <p>See the <a href="#">MDPartyTypeEnums</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                                                       |
|              |  |  | sbdh:DocumentIdentification | 1...1<br>-    | -      | <b>Required.</b> The identification group for the message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  | sbdh:Standard               | 1...1<br>0/*  | String | <b>Required.</b> The name of the document standard contained in the file/message. The standard value for this field is <b>EPCglobal</b> . <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |  |  | sbdh:TypeVersion            | 1...1<br>0/*  | String | <b>Required.</b> The version of the document included. This is the complete version of the document itself and is different from the <b>sbdh:HeaderVersion</b> as these are hard-coded values. The <b>sbdh:TypeVersion</b> is set to <b>1.0</b> . <sup>4</sup>                                                                                                                                                                                                                                                                                                                               |
|              |  |  | sbdh:InstanceIdentifier     | 1...1<br>1/*  | String | <b>Required.</b> The reference information, which uniquely identifies this instance of the Standard Business Document between the Sender and the Receiver. This is a hard-coded value. This identifier confirms this document as being distinct from others. <sup>5</sup>                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>0614141123452<sup>2</sup>GLN<sup>3</sup>EPCglobal<sup>4</sup>1.0<sup>5</sup>2013082106310032

| Data Element |           |           |             |                          |     | Occurs Length | Type     | Description                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-----------|-----------|-------------|--------------------------|-----|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |           |           |             | sbdh:Type                |     | 1...1<br>0/*  | String   | <b>Required.</b> The document type. The <b>sbdh:Type</b> value is set to <b>Events</b> for a shipment event. <sup>1</sup>                                                                                                                                                                                                                                                     |
|              |           |           |             | sbdh:CreationDateAndTime |     | 1...1<br>0/*  | DateTime | <b>Required.</b> The date and time of the SBDH document's creation. GMT create date and time for the EPCIS message. The system expects the <b>Z</b> to be appended; however if it is not included, the system assumes that the time is GMT and therefore appends the <b>Z</b> . <sup>2</sup>                                                                                  |
|              | EPCISBody |           |             |                          |     | 1...1<br>-    | -        | <b>Required.</b> All of the EPCIS events for this message.                                                                                                                                                                                                                                                                                                                    |
|              |           | EventList |             |                          |     | 1...1<br>-    | -        | <b>Required.</b> All events within the message including event details. A Decommission Event is indicated by the <b>action</b> , <b>bizstep</b> , and <b>disposition</b> . The details of the destroy event are also included (e.g. event time, epcs). The <b>ObjectEvent</b> for destroy events is the only event expected in the <b>EventList</b> .                         |
|              |           |           | ObjectEvent |                          |     | 1...<br>-     | -        | <b>Required.</b> The <b>ObjectEvent</b> field records destroy events when the following criteria is set accordingly (see <a href="#">Transaction Identifiers</a> for message type settings details).                                                                                                                                                                          |
|              |           |           |             | eventTime                |     | 1...1<br>1/*  | DateTime | <b>Required.</b> The date/time time stamp when the destroy event occurred. <sup>3</sup>                                                                                                                                                                                                                                                                                       |
|              |           |           |             | recordTime               |     | 0...1<br>0/*  | DateTime | Not used.                                                                                                                                                                                                                                                                                                                                                                     |
|              |           |           |             | eventTimeZoneOffset      |     | 1...1<br>1/*  | String   | <b>Required.</b> The time zone offset in the place where the event occurred, consistent with what choice was made for <b>eventTime</b> . A time offset is an amount of time subtracted from or added to UTC (Coordinated Universal Time) to get the current civil time - whether it is standard time or daylight saving time. Per Section 7.2.8 of (EPCIS1.0.1). <sup>4</sup> |
|              |           |           |             | epcList                  |     | 1...1<br>-    | -        | <b>Required.</b> The EPCs of each destroyed item, case, and/or pallet.                                                                                                                                                                                                                                                                                                        |
|              |           |           |             |                          | epc | 1...<br>1/*   | String   | <b>Required.</b> An item, pallet, or case EPC identifier. Numerous EPC identifiers can be provided, which creates a list of items/cases. <sup>5</sup>                                                                                                                                                                                                                         |

<sup>1</sup>Events<sup>2</sup>2017-04-30T19:12:53:33Z<sup>3</sup>2017-04-30T08:30:21:24Z<sup>4</sup>-05:00<sup>5</sup> See [EPC Pure Identifier Format Examples](#).

| Data Element |  |  |  |             | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|-------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | action      | 1...1<br>0/*  | String | <b>Required.</b> The action taken in the message. The <b>action</b> value is set to <b>DELETE</b> for a destroy event. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |  |  |  | bizStep     | 0...1<br>0/*  | AnyURI | <b>Required.</b> The business step taken in the event. The <b>bizStep</b> value is set to <b>urn:epcglobal:cbv:bizstep:destroying</b> for a destroy event. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  | disposition | 0...1<br>0/*  | AnyURI | <b>Required.</b> The <b>bizStep</b> , <b>disposition</b> , and <b>action</b> fields define the message event and are grouped together under the GS1 EPCIS guidelines. The <b>disposition</b> indicates the status of the transaction. The <b>disposition</b> value is set to <b>urn:epcglobal:cbv:disp:destroyed</b> for a destroy event. <sup>3</sup>                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | readPoint   | 1...1<br>-    | -      | <p><b>Required.</b> The location where the event occurred. Defined with GS1-conformant party identifier types with full urn or http prefix. SGLN is strongly preferred, but other party types are supported.</p> <p> <b>readPoint</b> links to location party address data if the data is present in VocabularyElement   @id. Use <b>readPoint</b> for master data lookup if it does not link to the location identifier in VocabularyElement   @id.</p>                                                                                                              |
|              |  |  |  | id          | 1...1<br>0/*  | AnyURI | <p><b>Required.</b> The party identifier of the location where the destroying event occurs. This may be a site-level SGLN or a finer-grain location identifier.<sup>4</sup></p> <p> If the location address info is populated in EPCISMasterData header extension, this location identifier links to VocabularyElement   @id. If the location address is not present in <b>VocabularyElement</b>, this identifier is used for master data lookup in the TraceLink system.</p> <p>See the <a href="#">MDPartyTypeAttributes</a> enumeration list for valid values.</p> |
|              |  |  |  | bizLocation | 0...1<br>-    | -      | The location where the event occurred.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | id          | 0...1<br>1/*  | AnyURI | The SGLN EPC of the location from where the event occurred. This may be a site-level SGLN or a finer-grain location identifier. Omitted for destroying event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>1</sup>DELETE<sup>2</sup>urn:epcglobal:cbv:bizstep:destroying<sup>3</sup>urn:epcglobal:cbv:disp:destroyed<sup>4</sup>urn:epc:id:sgln:8888882.02867.0

| Data Element |  |  |  |                           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|--|--|--|---------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | bizTransactionList        | 0...1<br>-    | -       | Business transaction list group.                                                                                                                                                                                                                                                                                                                                                                                                                         |
|              |  |  |  | bizTransaction            | 1...*<br>0/*  | AnyURI  | The transaction identifier associated with the destroyed product. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Required.</b><br>The transaction identifier type. Valid values: <ul style="list-style-type: none"> <li><a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a></li> <li><a href="http://epcis.tracelink.com/hc/btt/removal">http://epcis.tracelink.com/hc/btt/removal</a></li> <li><a href="urn:epcglobal:cbv:btt:rma">urn:epcglobal:cbv:btt:rma</a></li> </ul>                                     |
|              |  |  |  | @date                     | 0...1<br>0/*  | Date    | Transaction identifier date attribute in XML YYYY-MM-DD format. <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | locationId                | 0...1<br>-    | String  | Serialized Operations Manager External Subscriber Location identifier. Type of identifier defined by type enum below.<br><br>When messages are submitted by an external Serialized Operations Manager Partner, the system will use the subscriber company integration user to perform the action and log this in the audit trail so that all transactions executed by the external Serialized Operations Manager Partner are attributed to that company. |
|              |  |  |  | @type                     | 1...1<br>1/*  | String  | <b>Conditionally required</b> if <b>locationId</b> is populated. Attribute identifies the location types. See the <a href="#">MessagePartyIdType</a> enumeration list for valid values.                                                                                                                                                                                                                                                                  |
|              |  |  |  | tl:destroyEventExtensions | 0...1<br>-    | -       | The extensions used for destroying the <b>ObjectEvent</b> .                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | tl:transactionDate        | 0...1<br>0/*  | Date    | The date, in XML date format YYYY-MM-DD, associated with the business transaction document in the <b>bizTransactionList</b> . This date may or may not be the same as the <b>eventTime</b> field. <sup>3</sup>                                                                                                                                                                                                                                           |
|              |  |  |  | tl:disaggregateFromParent | 0...1<br>1/*  | Boolean | When set to <b>true</b> , instructs backend to disaggregate a serial number from its parent container (if it is aggregated) when setting the PackagingSerialNumberStatus of the serial number to <b>DECOMMISSIONED</b> or <b>DESTROYED</b> .                                                                                                                                                                                                             |

<sup>1</sup>urn:epcglobal:cbv:bt:0333331013655:45006290016<sup>2</sup>2019-04-01<sup>3</sup>2015-04-30

| Data Element |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|--|---------------------------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |                           |               |        | <p>If not set, or set to <b>false</b>, the backend operates in default mode, which is to generate an error when attempting to change the status of a serial number aggregated to a parent container.</p> <p>If source is not populated, target defaults to <b>false</b>.</p>                                                                                                                                |
|              |  |  |  |  | tl:marketCountryCode      | 0...1<br>2/2  | String | This field indicates the market country code. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                  |
|              |  |  |  |  | tl:businessPartyInfo      | 0...1<br>0/*  | -      | <p><b>Required.</b> Authorizing party information for the destroying event.</p> <div>  Master data lookup is supported for destroying events if the full location address is not present. If master data lookup is not intended, send complete address information for the location of the decommissioning event. </div> |
|              |  |  |  |  | tl:businessId             | 1...*<br>0/*  | String | <b>Required.</b> Identifier associated with the authorizing business entity.                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | @type                     | 1...1<br>0/*  | String | <p><b>Required.</b> The business identifier type.</p> <p>See the <a href="#">BusinessAndLocationId</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                               |
|              |  |  |  |  | tl:businessClassification | 0...1<br>0/*  | String | <p>The classification of business.</p> <p>See the <a href="#">BusinessClassification</a> enumeration list for valid values.</p>                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | tl:BusinessPartyDetail    | 0...1<br>-    | -      | Business name and address of the authorizing business entity.                                                                                                                                                                                                                                                                                                                                               |
|              |  |  |  |  | tl:businessName           | 1...1<br>0/*  | String | <b>Required.</b> Business name of the entity that is authorizing the destruction of serial numbers.                                                                                                                                                                                                                                                                                                         |
|              |  |  |  |  | tl:street1                | 1...1<br>0/*  | String | <b>Required.</b> First line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:street2                | 0...1<br>0/*  | String | Second line of the address for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |  | tl:city                   | 1...1<br>0/*  | String | <b>Required.</b> City for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                                                                                                                                 |

<sup>1</sup>US

| Data Element |  |  |  |  |  |                      | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|--|----------------------|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  | tl:village           | 0...1<br>0/*  | String | Name of the village in which the company is located.                                                                                                                                                                                                                                           |
|              |  |  |  |  |  | tl:houseNumber       | 0...1<br>0/*  | String | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China. For all addresses outside of China, continue to enter the building, house, or unit number in <b>tl:street1</b> .                                                    |
|              |  |  |  |  |  | tl:township          | 0...1<br>0/*  | String | Name of the township in which the company is located.                                                                                                                                                                                                                                          |
|              |  |  |  |  |  | tl:district          | 0...1<br>0/*  | String | <b>Conditionally required</b> for India. District code.<br><div>  Must be a 3-digit numeric code. </div>                                                                                                    |
|              |  |  |  |  |  | tl:stateOrRegion     | 1...1<br>0/*  | String | <b>Required.</b> The state, province, or region of the business entity indicated in <b>tl:businessName</b> , using the standard two-letter abbreviation specified in the ISO 3166-2:1998 country subdivision code.                                                                             |
|              |  |  |  |  |  | tl:postalCode        | 0...1<br>1/*  | String | Postal code for the company indicated in <b>tl:businessName</b> .                                                                                                                                                                                                                              |
|              |  |  |  |  |  | tl:country           | 1...1<br>0/*  | String | <b>Required.</b> The country where the company indicated in the <b>businessName</b> field is located. The country uses the standard two-letter abbreviation specified in the ISO 3166-1alpha-2:1997 country code.<br>See the <a href="#">ISOCountryCode</a> enumeration list for valid values. |
|              |  |  |  |  |  | tl:corporateFax      | 0...1<br>0/*  | String | Company fax number.                                                                                                                                                                                                                                                                            |
|              |  |  |  |  |  | tl:addressObjectGUID | 0...1<br>0/36 | String | The global identifier assigned by the Russian Federation Information Address System (FIAS). <sup>1</sup><br><div>  Maximum of 36 characters, using the digits 0-9 and letters A-F </div>                  |
|              |  |  |  |  |  | tl:houseGUID         | 0...1<br>0/36 | String | The global house identifier assigned by the Russian Federation Information Address System (FIAS). <sup>2</sup>                                                                                                                                                                                 |

<sup>1</sup>19406454-0022-000C-00B0-000000000152<sup>2</sup>986f2934-be05-438f-A30E-c15b90e15dbc



| Data Element |  |  |  |  |  |  |                           | Occurs Length | Type   | Description                                                                                                                                                                                   |
|--------------|--|--|--|--|--|--|---------------------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |  |  |                           |               |        |  Maximum of 36 characters, using the digits 0-9 and letters A-F                                            |
|              |  |  |  |  |  |  | tl:taxRegistrationCode    | 0...1<br>0/*  | String | The code used to identify this entity for tax or other legal reporting purposes (e.g. a Russia KPP Registration Code).                                                                        |
|              |  |  |  |  |  |  | tl:premisesCode           | 0...1<br>0/*  | String | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                         |
|              |  |  |  |  |  |  | tl:warehouseOperatorName  | 0...1<br>0/*  | String | <b>Conditionally required</b> for China. Name of the person responsible for warehouse operations in the transfer from business entity (where the serial numbers were destroyed). <sup>1</sup> |
|              |  |  |  |  |  |  | tl:decommissionReasonCode | 0...1<br>0/*  | String | The reason code for destroy. <sup>2</sup><br>See the <a href="#">DecommissionReasonCode</a> enumeration list for valid values.                                                                |
|              |  |  |  |  |  |  | tl:reasonDescription      | 0...1<br>0/*  | String | A brief description of why the product was destroyed. <sup>3</sup>                                                                                                                            |
|              |  |  |  |  |  |  | tl:destructionMethod      | 0...1<br>0/*  | String | Method of destruction. <sup>4</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                                           |

## Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<epcis:EPCISDocument xmlns:epcis="urn:epcglobal:epcis:xsd:1" xmlns:tl="http://epcis.tracelink.com/ns"
xmlns:sbdh="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
xmlns:epcglobal="urn:epcglobal:xsd:1" schemaVersion="1.2" creationDate="2017-01-30T08:30:21Z">
  <EPCISHeader>
    <sbdh:StandardBusinessDocumentHeader>
      <sbdh:HeaderVersion>1.0</sbdh:HeaderVersion>
      <sbdh:Sender>
        <sbdh:Identifier Authority="GLN">6667771013655</sbdh:Identifier>
      </sbdh:Sender>
    </sbdh:StandardBusinessDocumentHeader>
  </EPCISHeader>
</epcis:EPCISDocument>
```

<sup>1</sup>John Smith

<sup>2</sup>DESTROY\_DAMAGED

<sup>3</sup>The product was damaged.

<sup>4</sup>LIQUID\_DILUTION\_DRAINAGE

```

<sbdh:Receiver>
  <sbdh:Identifier Authority="GLN">8887771013655</sbdh:Identifier>
</sbdh:Receiver>
<sbdh:DocumentIdentification>
  <sbdh:Standard>EPCglobal</sbdh:Standard>
  <sbdh:TypeVersion>1.0</sbdh:TypeVersion>
  <sbdh:InstanceIdentifier>201911221845200002</sbdh:InstanceIdentifier>
  <sbdh:Type>Events</sbdh:Type>
  <sbdh:CreationDateAndTime>2019-11-22T18:45:20.0Z</sbdh:CreationDateAndTime>
</sbdh:DocumentIdentification>
</sbdh:StandardBusinessDocumentHeader>
</EPCISHeader>
<EPCISBody>
  <EventList>
    <ObjectEvent>
      <eventTime>2019-11-22T18:45:20.0Z</eventTime>
      <eventTimeZoneOffset>-05:00</eventTimeZoneOffset>
      <epcList>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024594</epc>
        <epc>urn:epc:id:sgtin:068202.0401034.11220207024595</epc>
      </epcList>
      <action>DELETE</action>
      <bizStep>urn:epcglobal:cbv:bizstep:destroying</bizStep>
      <disposition>urn:epcglobal:cbv:disp:destroyed</disposition>
      <readPoint>
        <id>urn:epc:id:sgln:6667771.01365.0</id>
      </readPoint>
      <bizLocation>
        <id>urn:epc:id:sgln:6667771.01365.0</id>
      </bizLocation>
      <tl:locationId type="GLN">6667771013655</tl:locationId>
      <tl:destroyEventExtensions>
        <tl:transactionDate>2019-11-22</tl:transactionDate>
        <tl:disaggregateFromParent>false</tl:disaggregateFromParent>
        <tl:marketCountryCode>RU</tl:marketCountryCode>
        <tl:businessPartyInfo>
          <tl:businessId type="SGLN">088202.867778.0</tl:businessId>
          <tl:businessClassification>DISTRIBUTOR</tl:businessClassification>
          <tl:BusinessPartyDetail>
            <tl:businessName>Russia Pharma</tl:businessName>
          </tl:BusinessPartyDetail>
        </tl:businessPartyInfo>
      </tl:destroyEventExtensions>
    </ObjectEvent>
  </EventList>
</EPCISBody>

```

```

        <tl:street1>Bolshoy Devyatinsky Lane 8</tl:street1>
        <tl:city>Moskva</tl:city>
        <tl:stateOrRegion>Presnensky</tl:stateOrRegion>
        <tl:postalCode>121099</tl:postalCode>
        <tl:country>RU</tl:country>
        <tl:addressObjectGUID>19406454-0022-000C-00B0-000000000152</tl:addressObjectGUID>
        <tl:houseGUID>986f2934-be05-438f-A30E-c15b90e15dbc</tl:houseGUID>
    </tl:BusinessPartyDetail>
</tl:businessPartyInfo>
<tl:warehouseOperatorName>Sergei Smith</tl:warehouseOperatorName>
<tl:decommissionReasonCode>PRODUCTION_DEFECT</tl:decommissionReasonCode>
<tl:reasonDescription>Defect from production</tl:reasonDescription>
</tl:destroyEventExtensions>
</ObjectEvent>
</EventList>
</EPCISBody>
</epcis:EPCISDocument>

```

## Errors

| Data Element                                           | Error Message                                         | Description                                                                                         | Inbound/Outbound |
|--------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------|
| Class 1                                                |                                                       |                                                                                                     |                  |
| sbdh:Sender   <b>sbdh:Identifier</b>                   | Source message sender is required !!!                 | The error occurs if the source is empty or null.                                                    | OB               |
| sbdh:Sender   sbdh:Identifier  <br><b>@Authority</b>   | Valid Sender/Identifier Authority is required !!!     | The error occurs if the source is present, but there is no matching entry in the lookup file.       | IB               |
|                                                        | Partner type in source type attribute is required !!! | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | OB               |
| sbdh:Receiver  <br><b>sbdh:Identifier</b>              | Source message receiver is required !!!               | The error occurs if the source is empty or null.                                                    | OB               |
| sbdh:Receiver   sbdh:Identifier<br>  <b>@Authority</b> | Valid Receiver/Identifier Authority is required !!!   | The error occurs if the source is present, but there is no matching entry in the lookup file.       | IB               |
|                                                        | Partner type in source type attribute is required !!! | The error occurs if the source is empty or null, or is not a valid value from the enumeration list. | OB               |
| ObjectEvent                                            | ObjectEvent is required for destroying!!!             | The error occurs if the source is empty or null.                                                    | IB               |

| Data Element           | Error Message                                                                           | Description                                                                                                                                            | Inbound/Outbound |
|------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| epc                    | Invalid EPC format !!!                                                                  | The error occurs if the number could not be translated, or has any other unrecognized content.                                                         | IB               |
|                        | Serial number is required !!!                                                           | The error occurs if the source is empty or null.                                                                                                       | OB               |
|                        | Valid serial number is required !!!                                                     | The error occurs if the serial number is invalid.                                                                                                      | OB               |
| action                 | Action DELETE is required for destroying!!!                                             | The error occurs if the source does not equal "DELETE" for the destroy event.                                                                          | IB               |
| bizstep                | bizStep urn:epcglobal:cbv:bizstep:destroying is required for destroying !!!             | The error occurs if the source does not equal "urn:epcglobal:cbv:bizstep:destroying".                                                                  | IB               |
| disposition            | Disposition urn:epcglobal:cbv:disp:destroyed is required for destroying!!!              | The error occurs if the source does not equal "urn:epcglobal:cbv:disp:destroyed".                                                                      | IB               |
| readPoint   id         | Event Location Required !!!                                                             | The error occurs if the source is empty or null.                                                                                                       | OB               |
|                        | Valid Event Location Type Required !!!                                                  | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                          | OB               |
|                        | Source read point ID is required !!!                                                    | The error occurs if the source is empty or null.                                                                                                       | IB               |
| bizTransaction   @type | Valid bizTransaction type is required if bizTransaction is populated !!!                | The error occurs if bizTransaction is present and the source is empty or null, or if the source is not a valid value from the enumeration list.        | IB               |
|                        | Valid transaction identifier type is required if TransactionIdentifier is populated !!! | The error occurs if transactionIdentifier is present and the source is empty or null, or if the source is not a valid value from the enumeration list. | OB               |
| locationId   @type     | @type occurs fewer times than its minimum number of occurrences.                        | The error occurs if the source is empty or null.                                                                                                       | IB               |
|                        | Location identifier type is required if location ID is populated !!!                    | The error occurs if the source is empty or null.                                                                                                       | IB               |
|                        | Valid location identifier type is required !!!                                          | The error occurs if the source is present, but there is no matching entry in the lookup file.                                                          | IB               |
| tl:transactionDate     | Destroy Event Transaction Date is required !!!                                          | The error occurs if the source is empty or null.                                                                                                       | OB               |
| tl:marketCountryCode   | Market Country Code must be at least two characters !!!                                 | The error occurs if data is less than two characters.                                                                                                  | IB               |
| tl:businessId          | Business party identifier is required !!!                                               | The error occurs if tl:businessPartyInfo is populated, but the source is empty or null.                                                                | IB               |

| Data Element                                                                                                     | Error Message                                                     | Description                                                                                                            | Inbound/Outbound |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------|
|                                                                                                                  | Destroying business party ID is required !!!                      | The error occurs if <b>tl:businessPartyInfo</b> is populated, but the source is empty or null.                         | OB               |
| tl:businessId   @type                                                                                            | Valid business identifier type is required !!!                    | The error occurs if the source is present, but there is no matching entry in the lookup file.                          | IB/OB            |
|                                                                                                                  | Party type attribute is required when BusinessId is populated !!! | The error occurs if tl:businessId is populated, but the source is empty or null.                                       | IB               |
| tl:businessClassification                                                                                        | Valid business classification value is required !!!               | The error occurs if the source is present, but there is no matching entry in the lookup file.                          | IB/OB            |
| tl:businessName                                                                                                  | Business name of business party is required !!!                   | The error occurs if the source is empty or null.                                                                       | IB/OB            |
| tl:street1                                                                                                       | Street address of business party is required !!!                  | The error occurs if the source is empty or null.                                                                       | IB/OB            |
| tl:city                                                                                                          | City of business party is required !!!                            | The error occurs if the source is empty or null.                                                                       | IB/OB            |
| tl:district                                                                                                      | 3-digit numeric District code required for country India !!!      | The error occurs if tl:country = "IN", but the source is not a 3-digit numeric code.                                   | IB/OB            |
| tl:stateOrRegion                                                                                                 | State or region of business party is required !!!                 | The error occurs if the source is empty or null.                                                                       | IB/OB            |
| tl:country                                                                                                       | Country of business party is required !!!                         | The error occurs if the source is empty or null.                                                                       | IB/OB            |
| tl:warehouseOperatorName                                                                                         | Warehouse operator name for China product is required !!!         | The error occurs if epcList   <b>epc</b> = "http://epcis.tracelink.com/obj/cn-edmn/", but the source is empty or null. | IB/OB            |
| tl:decommissionReasonCode                                                                                        | Valid reason code is required !!!                                 | The error occurs if the source is present, but there is no matching entry in the lookup file.                          | IB/OB            |
| tl:destructionMethod                                                                                             | Valid destruction method code is required !!!                     | The error occurs if the source is present, but there is no matching entry in the lookup file.                          | IB/OB            |
| <b>Class 2</b>                                                                                                   |                                                                   |                                                                                                                        |                  |
| Class 2 errors are thrown in response to the Serialized Operations Manager Destroy (EPCIS v1.2) inbound message. |                                                                   |                                                                                                                        |                  |
| destroyEvent                                                                                                     | Required field DestroyEvent is empty                              | The error occurs if the source is empty or null.                                                                       |                  |
|                                                                                                                  | More than one DestroyEvent found                                  | The error occurs if more than one source is found.                                                                     |                  |

| Data Element                                                                                                                                                      | Error Message                                                                                                                                                                                     | Description                                                                                         | Inbound/Outbound |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------|
| destroyParams                                                                                                                                                     | no DestroyParams found                                                                                                                                                                            | The error occurs if the source is empty or null.                                                    |                  |
|                                                                                                                                                                   | More than one DestroyParams found                                                                                                                                                                 | The error occurs if more than one source is found.                                                  |                  |
| inFilename, origFilename, origCompanyname, origFileDate, cntrlID                                                                                                  | File <inFilename> is a potential duplicate match with file <origFilename> sent from <origFilename> received on <origFileDate>, based on both files having the same File Control Number <cntrlID>. | The error occurs if file is a duplicate.                                                            |                  |
| message                                                                                                                                                           | message body is null                                                                                                                                                                              | The error occurs if the source is empty or null.                                                    |                  |
| tl:addressObjectGUID                                                                                                                                              | AddressObjectGUID cannot be blank for Country RU.                                                                                                                                                 | The error occurs if tl:country = "RU", but the source is empty or null.                             |                  |
| tl:businessPartyInfo                                                                                                                                              | Reporting Party is required when Transactions are included in the request and products are sold in Russia                                                                                         | The error occurs if a Target Market in Product Master Data = "RU", but the source is empty or null. |                  |
| <b>Class 3</b>                                                                                                                                                    |                                                                                                                                                                                                   |                                                                                                     |                  |
| The following is thrown for all Class 3 errors: "INTERNALERROR=Internal error from server [server details]." Please contact Support if this error is encountered. |                                                                                                                                                                                                   |                                                                                                     |                  |

## Destroy (SOAP)

### Destroy Request

#### Guidelines

❗ When sending an element in Date or DateTime format, a valid date must be given. "00" is not a valid day or month value and "0000" is not a valid year value.

The following data is sent in the request to TraceLink:

| Data Element     | Occurs Length | Type | Description                                  |
|------------------|---------------|------|----------------------------------------------|
| soapenv:Envelope | 1...1<br>-    | -    | <b>Required.</b> SOAP Envelope root element. |
| soapenv:Header   | 1...1         | -    | Not used by TraceLink.                       |

| Data Element |              |                |                        | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--------------|----------------|------------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | soapenv:Body |                |                        | 1...1<br>-    | -       | <b>Required.</b> SOAP Message Body.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |              | urn:Destroy    |                        | 1...1<br>-    | -       | <b>Required.</b> Destroy Message.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|              |              | DestroyRequest |                        | 0...1<br>-    | -       | <b>Required.</b> The destroy request message to destroy a set of serial numbers.                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              |              |                | DisaggregateFromParent | 0...1<br>1/*  | Boolean | <p>A flag that determines whether the system automatically disaggregates child serial numbers from the parent container, where relevant.</p> <ul style="list-style-type: none"> <li>If set to <b>true</b>, the system automatically disaggregates child serial numbers from the parent container if they are aggregated.</li> <li>If set to <b>false</b>, and the serial number to be destroyed is aggregated to a parent container, the system returns an error. Defaults to <b>false</b>.</li> </ul> |
|              |              |                | Items                  | 0...1<br>-    | -       | <b>Required.</b> The list of one or more serial numbers to be destroyed.                                                                                                                                                                                                                                                                                                                                                                                                                               |
|              |              |                | Item                   | 1...*<br>-    | -       | <b>Required.</b> The serial number to be destroyed.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |              |                | @sn                    | 1...1<br>1/*  | String  | <b>Required.</b> A serial number that will be destroyed. See <a href="#">Serial Number Data Examples</a> . <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                |
|              |              |                | @namespace             | 0...1<br>1/*  | String  | Not supported by TraceLink.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |              |                | Sampled                | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled.<sup>2</sup></p> <div>  One, and only one, of the following reason code elements may be set to true:           <ul style="list-style-type: none"> <li><b>Sampled</b></li> <li><b>Damaged</b></li> <li><b>Recalled</b></li> </ul> </div>                                                                               |

<sup>1</sup>00008820200000047506<sup>2</sup>true

| Data Element |  |  |  |         | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--|--|--|---------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |         |               |         | <ul style="list-style-type: none"> <li>Expired</li> <li>Misplaced</li> <li>Dispensed</li> <li>Disposed</li> <li>Repackaged</li> <li>SampledArchival</li> <li>SampledByAuthorities</li> <li>Stolen</li> <li>Withdrawn</li> <li>SampledCustomsControl</li> <li>SampledFederalInspection</li> <li>SampledClinicalStudy</li> <li>SampledPharmaStudy</li> <li>SampledMarketingDemo</li> <li>SampledSelectiveControl</li> <li>Spoilage</li> <li>WithdrawnExperiment</li> <li>Defective</li> <li>InappropriatelyStored</li> <li>Returned</li> <li>Other</li> </ul> |
|              |  |  |  | Damaged | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was damaged.<sup>1</sup></p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p>                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>false



| Data Element |  |  |  |  | Occurs Length | Type | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--|---------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |               |      | <ul style="list-style-type: none"><li>• <b>Sampled</b></li><li>• <b>Damaged</b></li><li>• <b>Recalled</b></li><li>• <b>Expired</b></li><li>• <b>Misplaced</b></li><li>• <b>Dispensed</b></li><li>• <b>Disposed</b></li><li>• <b>Repackaged</b></li><li>• <b>SampledArchival</b></li><li>• <b>SampledByAuthorities</b></li><li>• <b>Stolen</b></li><li>• <b>Withdrawn</b></li><li>• <b>SampledCustomsControl</b></li><li>• <b>SampledFederalInspection</b></li><li>• <b>SampledClinicalStudy</b></li><li>• <b>SampledPharmaStudy</b></li><li>• <b>SampledMarketingDemo</b></li><li>• <b>SampledSelectiveControl</b></li><li>• <b>Spoilage</b></li><li>• <b>WithdrawnExperiment</b></li><li>• <b>Defective</b></li><li>• <b>InappropriatelyStored</b></li><li>• <b>Returned</b></li><li>• <b>Other</b></li></ul> |

| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|----------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | Recalled | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was recalled.<sup>1</sup></p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> </ul> |

<sup>1</sup>false

| Data Element |  |  |  |         | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|---------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |         |               |         | <ul style="list-style-type: none"> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  | Expired | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is expired.<sup>1</sup></p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> </ul> |

<sup>1</sup>false

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|-----------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|              |  |  |  | Misplaced | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was misplaced.<sup>1</sup></p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> </ul> |

<sup>1</sup>false

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|-----------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | Dispensed | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was dispensed.<sup>1</sup></p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> </ul> |

<sup>1</sup>false

| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|----------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |               |         | <ul style="list-style-type: none"> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                         |
|              |  |  |  | Disposed | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was disposed.<sup>1</sup></p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> </ul> |

<sup>1</sup>false

| Data Element |  |  |  |            | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|--|--|--|------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |            |               |         | <ul style="list-style-type: none"> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  | Repackaged | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is repackaged.<sup>1</sup></p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> </ul>                                                                                           |

<sup>1</sup>false

| Data Element |  |  |  |                      | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------|--|--|--|----------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                      |               |         | <ul style="list-style-type: none"> <li>• Repackaged</li> <li>• SampledArchival</li> <li>• SampledByAuthorities</li> <li>• Stolen</li> <li>• Withdrawn</li> <li>• SampledCustomsControl</li> <li>• SampledFederalInspection</li> <li>• SampledClinicalStudy</li> <li>• SampledPharmaStudy</li> <li>• SampledMarketingDemo</li> <li>• SampledSelectiveControl</li> <li>• Spoilage</li> <li>• WithdrawnExperiment</li> <li>• Defective</li> <li>• InappropriatelyStored</li> <li>• Returned</li> <li>• Other</li> </ul> |
|              |  |  |  | SampledByAuthorities | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled by authorities.<sup>1</sup></p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• Sampled</li> <li>• Damaged</li> <li>• Recalled</li> <li>• Expired</li> </ul>                                                                                                                                                                            |

<sup>1</sup>false



| Data Element |  |  |  |        | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--|--|--|--------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |        |               |         | <ul style="list-style-type: none"> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  | Stolen | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is stolen.<sup>1</sup></p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>1</sup>false

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|-----------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"> <li>• Damaged</li> <li>• Recalled</li> <li>• Expired</li> <li>• Misplaced</li> <li>• Dispensed</li> <li>• Disposed</li> <li>• Repackaged</li> <li>• SampledArchival</li> <li>• SampledByAuthorities</li> <li>• Stolen</li> <li>• Withdrawn</li> <li>• SampledCustomsControl</li> <li>• SampledFederalInspection</li> <li>• SampledClinicalStudy</li> <li>• SampledPharmaStudy</li> <li>• SampledMarketingDemo</li> <li>• SampledSelectiveControl</li> <li>• Spoilage</li> <li>• WithdrawnExperiment</li> <li>• Defective</li> <li>• InappropriatelyStored</li> <li>• Returned</li> <li>• Other</li> </ul> |
|              |  |  |  | Withdrawn | 0...1         | Boolean | Item attribute set with Serial Number State and Item State indicating the item is withdrawn. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

<sup>1</sup>false

| Data Element |  |  |  |  | Occurs Length | Type | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|--|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |               |      | <div><div>ⓘ</div><div>One, and only one, of the following reason code elements may be set to true:</div><ul style="list-style-type: none"><li>• <b>Sampled</b></li><li>• <b>Damaged</b></li><li>• <b>Recalled</b></li><li>• <b>Expired</b></li><li>• <b>Misplaced</b></li><li>• <b>Dispensed</b></li><li>• <b>Disposed</b></li><li>• <b>Repackaged</b></li><li>• <b>SampledArchival</b></li><li>• <b>SampledByAuthorities</b></li><li>• <b>Stolen</b></li><li>• <b>Withdrawn</b></li><li>• <b>SampledCustomsControl</b></li><li>• <b>SampledFederalInspection</b></li><li>• <b>SampledClinicalStudy</b></li><li>• <b>SampledPharmaStudy</b></li><li>• <b>SampledMarketingDemo</b></li><li>• <b>SampledSelectiveControl</b></li><li>• <b>Spoilage</b></li><li>• <b>WithdrawnExperiment</b></li><li>• <b>Defective</b></li><li>• <b>InappropriatelyStored</b></li><li>• <b>Returned</b></li><li>• <b>Other</b></li></ul></div> |

| Data Element |  |  |  |                 | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--|--|--|-----------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | SampledArchival | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for archival purposes.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |

| Data Element |  |  |  |                       | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|--|--|--|-----------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | SampledCustomsControl | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for customs inspection.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |

| Data Element |  |  |  |                          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|--|--|--|--------------------------|---------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                          |               |         | Item attribute set with Serial Number State and Item State indicating the item was sampled for federal inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|              |  |  |  |                          |               |         | <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  | SampledFederalInspection | 0...1<br>1/*  | Boolean |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Data Element |  |  |  |                      | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|----------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | SampledClinicalStudy | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for performing clinical studies.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |

| Data Element |  |  |  | Occurs Length | Type | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|---------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |               |      | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for post-registration pharmaceutical study supporting submitted changes to a dossier.</p> <div><p> One, and only one, of the following reason code elements may be set to true:</p><ul style="list-style-type: none"><li>• <b>Sampled</b></li><li>• <b>Damaged</b></li><li>• <b>Recalled</b></li><li>• <b>Expired</b></li><li>• <b>Misplaced</b></li><li>• <b>Dispensed</b></li><li>• <b>Disposed</b></li><li>• <b>Repackaged</b></li><li>• <b>SampledArchival</b></li><li>• <b>SampledByAuthorities</b></li><li>• <b>Stolen</b></li><li>• <b>Withdrawn</b></li><li>• <b>SampledCustomsControl</b></li><li>• <b>SampledFederalInspection</b></li><li>• <b>SampledClinicalStudy</b></li><li>• <b>SampledPharmaStudy</b></li><li>• <b>SampledMarketingDemo</b></li><li>• <b>SampledSelectiveControl</b></li><li>• <b>Spoilage</b></li><li>• <b>WithdrawnExperiment</b></li><li>• <b>Defective</b></li><li>• <b>InappropriatelyStored</b></li><li>• <b>Returned</b></li></ul></div> |



| Data Element |  |  |  |                      | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|----------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                      |               |         | <ul style="list-style-type: none"> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  |                      |               |         | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for marketing demonstration purposes.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> </ul> |
|              |  |  |  | SampledMarketingDemo | 0...1<br>1/*  | Boolean |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Data Element |  |  |  |                         | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|-------------------------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                         |               |         | <ul style="list-style-type: none"> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  | SampledSelectiveControl | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was sampled for selective control.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> </ul> |

| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|----------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |               |         | <ul style="list-style-type: none"> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |  |  |  | Spoilage | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is spoiled (e.g. due to heat, oxygen, moisture, microorganisms).</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> </ul> |

| Data Element |  |  |  |                     | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|---------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                     |               |         | <ul style="list-style-type: none"> <li>• Spoilage</li> <li>• WithdrawnExperiment</li> <li>• Defective</li> <li>• InappropriatelyStored</li> <li>• Returned</li> <li>• Other</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|              |  |  |  | WithdrawnExperiment | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is withdrawn from circulation of SSCC or SGTIN, piled or accumulated in the course of the experiment.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• Sampled</li> <li>• Damaged</li> <li>• Recalled</li> <li>• Expired</li> <li>• Misplaced</li> <li>• Dispensed</li> <li>• Disposed</li> <li>• Repackaged</li> <li>• SampledArchival</li> <li>• SampledByAuthorities</li> <li>• Stolen</li> <li>• Withdrawn</li> <li>• SampledCustomsControl</li> <li>• SampledFederalInspection</li> <li>• SampledClinicalStudy</li> <li>• SampledPharmaStudy</li> </ul> |

| Data Element |  |  |  |           | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--|--|--|-----------|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |           |               |         | <ul style="list-style-type: none"> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                   |
|              |  |  |  | Defective | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item is defective.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> </ul> |

| Data Element |  |  |  |                       | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|--|--|--|-----------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                       |               |         | <ul style="list-style-type: none"> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                                                                                                                     |
|              |  |  |  | InappropriatelyStored | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was inappropriately stored.</p> <p>❗ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> </ul> |

| Data Element |  |  |  |          | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|--|--|--|----------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |          |               |         | <ul style="list-style-type: none"> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                                                                                     |
|              |  |  |  | Returned | 0...<br>11/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was returned.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> <li>• <b>SampledCustomsControl</b></li> </ul> |

| Data Element |  |  |  |       | Occurs Length | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|--|--|--|-------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |       |               |         | <ul style="list-style-type: none"> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul>                                                                                                                                                                     |
|              |  |  |  | Other | 0...1<br>1/*  | Boolean | <p>Item attribute set with Serial Number State and Item State indicating the item was destroyed for other reasons.</p> <p>⚠ One, and only one, of the following reason code elements may be set to true:</p> <ul style="list-style-type: none"> <li>• <b>Sampled</b></li> <li>• <b>Damaged</b></li> <li>• <b>Recalled</b></li> <li>• <b>Expired</b></li> <li>• <b>Misplaced</b></li> <li>• <b>Dispensed</b></li> <li>• <b>Disposed</b></li> <li>• <b>Repackaged</b></li> <li>• <b>SampledArchival</b></li> <li>• <b>SampledByAuthorities</b></li> <li>• <b>Stolen</b></li> <li>• <b>Withdrawn</b></li> </ul> |



| Data Element |  |  |  |  |               | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--|--|--|--|---------------|---------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |  |               |               |        | <ul style="list-style-type: none"> <li>• <b>SampledCustomsControl</b></li> <li>• <b>SampledFederalInspection</b></li> <li>• <b>SampledClinicalStudy</b></li> <li>• <b>SampledPharmaStudy</b></li> <li>• <b>SampledMarketingDemo</b></li> <li>• <b>SampledSelectiveControl</b></li> <li>• <b>Spoilage</b></li> <li>• <b>WithdrawnExperiment</b></li> <li>• <b>Defective</b></li> <li>• <b>InappropriatelyStored</b></li> <li>• <b>Returned</b></li> <li>• <b>Other</b></li> </ul> |
|              |  |  |  |  | ReasonCode    | 0...1<br>–    | String | <p>A code that indicates the reason for the change in serial number status.<sup>1</sup></p> <p> This is an optional field. If not specified, defaults to <b>STATUSUPDATE</b>.</p> <p>See the <a href="#">ReasonCode</a> enumeration list for valid values.</p>                                                                                                                                  |
|              |  |  |  |  | EventDateTime | 0...1<br>–    | Date   | The date and time of the event in XSD GMT date format (YYYY-MM-DDTHH:MM:SSZ). If omitted, the system will record the current date-time. <sup>2</sup>                                                                                                                                                                                                                                                                                                                             |
|              |  |  |  |  | Transactions  | 0...1<br>–    | -      | <b>Required.</b> The transaction identifiers associated with the destruction.                                                                                                                                                                                                                                                                                                                                                                                                    |
|              |  |  |  |  | Transaction   | 0...*<br>1/*  | String | <b>Required.</b> The list of one or more transaction identifiers associated with the destruction.                                                                                                                                                                                                                                                                                                                                                                                |
|              |  |  |  |  | ItemID        | 0...1         | String | <b>Required.</b> The transaction identifier associated with the destruction. <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup>INCORRECTSTATUS or STATUSUPDATE<sup>2</sup>2015-06-01T17:10:16Z<sup>3</sup>100250

| Data Element |  |  |  |                          |                  | Occurs Length | Type    | Description                                                                                                                                                                                                  |
|--------------|--|--|--|--------------------------|------------------|---------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  |                          |                  |               |         | <div>⚠ For Turkey and China, provide the destruction order number.</div>                                                                                                                                     |
|              |  |  |  |                          | ItemType         | 0...1<br>1/*  | String  | <b>Required.</b> The transaction identifier type using the supported enumeration values (e.g. <b>DESTRUCTION</b> ). <sup>1</sup><br>See the <a href="#">TransactionId</a> enumeration list for valid values. |
|              |  |  |  |                          | Date             | 0...1<br>1/*  | String  | <b>Required.</b> The date of the transaction in XML YYYY-MM-DD format. This value is used for regulatory reporting of the transaction date. <sup>2</sup>                                                     |
|              |  |  |  | ReasonDescription        |                  | 0...1<br>1/*  | String  | <b>Conditionally required</b> for Turkey, where the description must be in Turkish and not exceed 100 characters. The reason for the destruction. <sup>3</sup>                                               |
|              |  |  |  | DestructionMethod        |                  | 0...1<br>1/*  | String  | <b>Required.</b> The method of product destruction. <sup>4</sup><br>See the <a href="#">DestructionMethod</a> enumeration list for valid values.                                                             |
|              |  |  |  | LongRunningRestSupport   |                  | -<br>-        | Boolean | Not used.                                                                                                                                                                                                    |
|              |  |  |  | ReportingPartyIdentifier |                  | 0...1<br>1/*  | String  | <b>Required.</b> The identifier of the business party that will be reporting the event to the government. <sup>5</sup>                                                                                       |
|              |  |  |  |                          | @identifiertype  | 0...1<br>1/*  | String  | <b>Required.</b> The reporting business party identifier type. <sup>6</sup><br>See the <a href="#">IdentifierType</a> enumeration list for valid values.                                                     |
|              |  |  |  |                          | @identifiervalue | 0...1<br>1/*  | String  | The identifier value of the reporting business party. <sup>7</sup>                                                                                                                                           |
|              |  |  |  | MarketCountryCode        |                  | 0...1<br>2/3  | String  | The country, using the standard two-letter abbreviation specified in ISO 3166-1alpha-2:1997 country code. <sup>8</sup>                                                                                       |
|              |  |  |  | LocationType             |                  | 0...1<br>1/*  | String  | The type of location where the event occurred. See the <a href="#">LocationId</a> enumeration list for valid values.                                                                                         |

<sup>1</sup>DESTRUCTION<sup>2</sup>2015-06-01<sup>3</sup>Damaged goods in the warehouse.<sup>4</sup>INCINERATION<sup>5</sup>8888882028677<sup>6</sup>DEA<sup>7</sup>123456789<sup>8</sup>TR

| Data Element |  |  |  |          | Occurs Length | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|--|--|--|----------|---------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |  |  |  | Location | 0...1<br>1/*  | String | <p><b>Required.</b> The site-level location identifier where the event occurred. This element defaults to the company level if no location is provided.<sup>1</sup></p> <p> In most cases, this value is an SGLN, the format for which must be the numeric component only, with the urn prefix stripped (e.g. 8888882.02867.0 instead of urn:epc:id:sgln:8888882.02867.0 typically found in EPCIS events).</p> |

## Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:urn="urn:tracelink:soap">
  <soapenv:Header/>
  <soapenv:Body>
    <urn:Destroy>
      <DestroyRequest>
        <DisaggregateFromParent>true</DisaggregateFromParent>
        <Items>
          <Item sn="88102321100002083327"/>
        </Items>
        <Sampled>false</Sampled>
        <Damaged>false</Damaged>
        <Recalled>false</Recalled>
        <Expired>false</Expired>
        <MarketReleased>false</MarketReleased>
        <Misplaced>true</Misplaced>
        <Dispensed>false</Dispensed>
        <Disposed>false</Disposed>
        <Repackaged>false</Repackaged>
        <SampledByAuthorities>false</SampledByAuthorities>
        <Stolen>false</Stolen>
        <Withdrawn>false</Withdrawn>
        <SampledArchival>false</SampledArchival>
        <SampledCustomsControl>false</SampledCustomsControl>
        <SampledFederalInspection>false</SampledFederalInspection>
      </DestroyRequest>
    </urn:Destroy>
  </soapenv:Body>
</soapenv:Envelope>
```

<sup>1</sup>8888882.02867.0

```

    <SampledClinicalStudy>false</SampledClinicalStudy>
    <SampledPharmaStudy>false</SampledPharmaStudy>
    <SampledMarketingDemo>false</SampledMarketingDemo>
    <SampledSelectiveControl>false</SampledSelectiveControl>
    <Spoilage>false</Spoilage>
    <WithdrawnExperiment>false</WithdrawnExperiment>
    <Defective>false</Defective>
    <InappropriatelyStored>false</InappropriatelyStored>
    <Returned>false</Returned>
    <Other>false</Other>
    <ReasonCode>STATUSUPDATE</ReasonCode>
    <EventDateTime>2015-07-28T22:15:00Z</EventDateTime>
    <Transactions>
      <Transaction>
        <ItemID>10025241</ItemID>
        <ItemType>DESTRUCTION</ItemType>
        <Date>2015-07-28</Date>
      </Transaction>
    </Transactions>
    <ReasonDescription>Unable to locate case in the warehouse</ReasonDescription>
    <MarketCountryCode>CN</MarketCountryCode>
    <LocationType>SGLN<LocationType>
      <Location>8888882.02867.0</Location>
    </DestroyRequest>
  </urn:Destroy>
</soapenv:Body>
</soapenv:Envelope>

```

## Errors

| Exception Code     | Exception Message                                                                                                                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BADAGGREGATESTATE  | Operation could not be performed because serial number <serial number> and serial number <parent serial number> are currently in different states, or the operation would result in them having different states. Parent and child serial numbers are not permitted to be in different states. |
| CANNOTBEAGGREGATED | Operation could not be performed because serial number <serial number> is aggregated to container <parent serial number>.                                                                                                                                                                      |
| CROSSLOCATIONS     | Operation cannot be performed against serial numbers in multiple locations.                                                                                                                                                                                                                    |

| Exception Code                  | Exception Message                                                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| EVENTTIMEAFTERNOW               | Event time stamp must not be in the future.                                                                           |
| EVENTTIMEBEFORELASTEVENT        | Event time stamp is earlier than the last event for serial number <serial number>.                                    |
| MLTUPLE_ATTRIBUTES_DECOMMISSION | The serial number(s) could not be decommissioned. The Decommission API request may only specify a single reason code. |
| NEVERCOMMISSIONED               | Serial number <serial number> was never commissioned.                                                                 |
| NOSOMSERVICE                    | No Serialized Operations Manager service found.                                                                       |
| NOTCOMMISSIONED                 | Serial number <serial number> is not commissioned.                                                                    |
| NOTCOMMISSIONEDLOCATION         | Serial Number <serial number> was not commissioned at this location.                                                  |
| NOTVALIDLOCATION                | Location <location identifier> was not valid for serial number <serial number>.                                       |
| SNNOTFOUND                      | Serial number <serial number> does not exist.                                                                         |
| SOMDUPLICATESNS                 | The following serial numbers were listed more than once: <serial number>.                                             |
| VALIDATION                      | Destruction Method is required for products sold in Russia.                                                           |
|                                 | Item Attribute is required for products sold in Russia.                                                               |
|                                 | Location is required for products sold in Russia.                                                                     |
|                                 | Reporting Party is required when Transactions are included in the request and products are sold in Russia.            |
|                                 | The parameter <field name> is missing or had an invalid value.                                                        |
|                                 | Transaction Identifier for 'Removal from Circulation' is required for products sold in Russia.                        |

## Destroy Response

### Guidelines

The following data is included in the message response:

| Data Element        |  |  |  |  |  |  | Occurs Length | Type   | Description                                                                                                           |
|---------------------|--|--|--|--|--|--|---------------|--------|-----------------------------------------------------------------------------------------------------------------------|
| S:Envelope          |  |  |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> SOAP Envelope root element.                                                                          |
| S:Body              |  |  |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> SOAP Message Body.                                                                                   |
| ns2:DestroyResponse |  |  |  |  |  |  | 1...1<br>-    | -      | <b>Required.</b> Destroy response message.                                                                            |
| TLResponse          |  |  |  |  |  |  | 0...1<br>-    | -      | <b>Required.</b> TraceLink response.                                                                                  |
| Success             |  |  |  |  |  |  | 0...1<br>-    | -      | <b>Required.</b> Indicates if Destroy request processed successfully. <sup>1</sup>                                    |
| ExceptionReturn     |  |  |  |  |  |  | 0...1<br>-    | -      | <b>Conditionally required</b> if <b>Success</b> = <code>false</code> , otherwise omitted. Contains error information. |
| CallException       |  |  |  |  |  |  | 1...<br>*     | -      | <b>Required.</b> Error details including exception code and error message, if available.                              |
| ExceptionCode       |  |  |  |  |  |  | 0...1<br>0/*  | String | <b>Required.</b> Error code.                                                                                          |
| ExceptionMessage    |  |  |  |  |  |  | 0...1<br>0/*  | String | <b>Conditionally required</b> if exception message exists. Message that further describes error condition.            |

## Example

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:DestroyResponse xmlns:ns2="urn:tracelink:soap" xmlns:ns3="http://tracelink.com/som">
      <TLResponse>
        <Success>true</Success>
      </TLResponse>
    </ns2:DestroyResponse>
  </S:Body>
</S:Envelope>
```

<sup>1</sup>true



# Enumerations



# Aggregation

## AggregationInspection

Choose from one of the following enumerators:

| Data Code  | Description                                                                                                                                                                                                            |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VERIFIED   | The aggregation hierarchy of the delivery was scanned down to the each level.                                                                                                                                          |
| UNVERIFIED | Only the top-level (e.g. pallet) aggregation hierarchy of the delivery was scanned, and the remaining aggregation levels are unknown to TraceLink.                                                                     |
| IMPLIED    | The entire aggregation hierarchy for the delivery is known to TraceLink, but only the top level (e.g. pallet) was scanned. The lower aggregation levels were provided previously (e.g. in an aggregation or shipment). |

## DeliveryInspection

Choose from one of the following enumerators:

| Data Code    | Description                                                                                |
|--------------|--------------------------------------------------------------------------------------------|
| NOTINSPECTED | The contents of the delivery were not inspected.                                           |
| PASSED       | The contents of the delivery were inspected and match the associated documentation.        |
| FAILED       | The contents of the delivery were inspected and do not match the associated documentation. |

## PackagingLevel

Choose from one of the enumerators below:

The following values are only applicable for elements in the EPCIS Header Vocabulary Product Master Data group:



| Data Code | Description          |
|-----------|----------------------|
| BE        | Innerpack or bundle. |
| CS        | Case or shipper.     |
| PX        | Pallet               |
| UN        | Saleable item unit.  |

The following values are only applicable for the elements using the TraceLink namespace (i.e. "tl:");

| Data Code | Description          |
|-----------|----------------------|
| CA        | Case or shipper.     |
| EA        | Saleable item unit.  |
| PK        | Innerpack or bundle. |
| PL        | Pallet               |

## PackedStatus

Choose from one of the enumerators below:

| Data Code     | Description                     | Encoding Description        |
|---------------|---------------------------------|-----------------------------|
| FULL          | Full, homogeneous container.    | packed-status-FULL          |
| MIXED         | Full, mixed container.          | packed-status-MIXED         |
| PARTIAL       | Partial, homogeneous container. | packed-status-PARTIAL       |
| PARTIAL_MIXED | Partial, mixed container.       | packed-status-PARTIAL_MIXED |

# PackLevel

Choose from one of the enumerators below:

| Data Code | Description      |
|-----------|------------------|
| CA        | Case/Shipper     |
| EA        | Each             |
| PK        | Innerpack/Bundle |
| PL        | Pallet           |

# Company and location identifiers

## BusinessAndLocationId

Choose from one of the enumerators below:

| Data Code      | Description                                                                                                                                                                                                                                                   |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AM_TIN         | Armenia Taxpayer Identification Number.                                                                                                                                                                                                                       |
| BR_PROF_REG    | Brazil Professional Registration Number.                                                                                                                                                                                                                      |
| BY_TIN         | Belarus Taxpayer Identification Number.                                                                                                                                                                                                                       |
| BR_CNES        | Brazil National Registry of Health Facilities Number.                                                                                                                                                                                                         |
| CN_FOREIGN_MAH | China Foreign MAH ID.                                                                                                                                                                                                                                         |
| CN_FOREIGN_MFR | China Foreign Manufacturer ID.                                                                                                                                                                                                                                |
| BR_CNPJ        | Brazil Tax ID.                                                                                                                                                                                                                                                |
| CN_USCID       | China Unified Social Credit Identifier.                                                                                                                                                                                                                       |
| COMPANYID      | Company Id in Internal ERP System.                                                                                                                                                                                                                            |
| COMPANYSITEID  | Internal Location or Site Id in Internal ERP System.                                                                                                                                                                                                          |
| BR_CPF         | Brazil Individual Tax Payer ID.                                                                                                                                                                                                                               |
| CUIT           | Argentina Tax ID.                                                                                                                                                                                                                                             |
| DEA            | Drug Enforcement Agency Number.                                                                                                                                                                                                                               |
| DE_IFA_REG_NUM | Informationsstelle für Arzneispezialitäten (IFA) Registration Number.                                                                                                                                                                                         |
| DUNS           | Dun & Bradstreet Number.                                                                                                                                                                                                                                      |
| DUNS4          | Dun & Bradstreet Number + 4-digit Location Code.<br><div>  Only valid for these messages:           <ul style="list-style-type: none"> <li>Receive Event</li> </ul> </div> |

| Data Code         | Description                                                                                                                                                                                                                                                                                                     |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | <ul style="list-style-type: none"> <li>Sales Shipment Evenr</li> </ul>                                                                                                                                                                                                                                          |
| DUNS_PLUS_FOUR    | <p>Dun &amp; Bradstreet Number + 4-digit Location Code.</p> <p> Only valid for these messages:</p> <ul style="list-style-type: none"> <li>End of Batch Event</li> <li>Product Release Event</li> <li>Shipment Event</li> </ul> |
| EIN               | Employee Identification Number.                                                                                                                                                                                                                                                                                 |
| GCP               | GS1 Global Company Prefix (6- to 12-digit number).                                                                                                                                                                                                                                                              |
| GLN               | Global Location Number.                                                                                                                                                                                                                                                                                         |
| HIN               | Health Industry Number partner address ID.                                                                                                                                                                                                                                                                      |
| IN_COMPANY_ID     | India Company Identifier (alphanumeric).                                                                                                                                                                                                                                                                        |
| IN_GSTN           | India Goods and Services Tax ID.                                                                                                                                                                                                                                                                                |
| IN_IEC            | India Importer Exporter Code (10-digit number).                                                                                                                                                                                                                                                                 |
| IN_LOCATION_ID    | India company location identifier (alphanumeric).                                                                                                                                                                                                                                                               |
| IN_MFR            | India Manufacturer Code.                                                                                                                                                                                                                                                                                        |
| IN_MRCH           | India Merchant Exporter Code.                                                                                                                                                                                                                                                                                   |
| IN_PAN            | India Permanent Account Number (10-character alphanumeric, with format AAPL1234C, with the first five characters are letters, next four numerals, last character is a check-digit character letter).                                                                                                            |
| IN_TIN            | India Taxpayer Identification Number (11-digit number).                                                                                                                                                                                                                                                         |
| KG_TIN            | Kyrgyzstan Taxpayer Identification Number.                                                                                                                                                                                                                                                                      |
| KR_BUS_REG_NUMBER | Korea Business Registration Number (10 digits with format 000-00-0000).                                                                                                                                                                                                                                         |
| KR_PROVIDER_CODE  | Korea Provider Code (8-digit number).                                                                                                                                                                                                                                                                           |
| KZ_BIN            | Kazakhstan Business Identification Number.                                                                                                                                                                                                                                                                      |
| RU_ACCOUNT_NUMBER | Russia Account Number.                                                                                                                                                                                                                                                                                          |

| Data Code             | Description                                                                                                                                                                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RU_INN_FOREIGN_ENTITY | <p>Russia Foreign Business Taxpayer Identification Number.</p> <p>⚠ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul> |
| RU_INN_INDIV          | <p>Russia Individual Taxpayer Identification Number.</p> <p>⚠ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul>       |
| RU_INN_KPP_TAX_CODE   | Russia KPP (supplementary tax registration ID numbers) Tax Identification Code.                                                                                                                                                                              |
| RU_INN_LOCAL_ENTITY   | <p>Russia Local Business Taxpayer Identification Number.</p> <p>⚠ Only one of the following values may be used per message:</p> <ul style="list-style-type: none"> <li>RU_INN_FOREIGN_ENTITY</li> <li>RU_INN_INDIV</li> <li>RU_INN_LOCAL_ENTITY</li> </ul>   |
| SGLN                  | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. First two segments contain only digits.                                                                                                                |
| TRACELINK_ID          | TraceLink Identification Number.                                                                                                                                                                                                                             |
| UZ_TIN                | Uzbekistan Taxpayer Identification Number (9-digit number).                                                                                                                                                                                                  |

## BusinessLookupId

Choose from one of the following enumerators:

| Data Code         | Description                                                                            |
|-------------------|----------------------------------------------------------------------------------------|
| BR_PROF_REG       | Brazil Professional Registration Number.                                               |
| BR_CNES           | Brazil Individual Taxpayer Registration Number (11 digits with format 000.000.000-00). |
| BR_CNPJ           | Brazil National Registry of Health Facilities Number.                                  |
| COMPANYID         | Company Id in Internal ERP System.                                                     |
| COMPANYSITEID     | Internal location or site Id in the internal ERP system.                               |
| BR_CPF            | Brazil Tax / Legal Entity ID (14 digits with format 00.000.000/0001-00).               |
| DUNS              | Dunn and Bradstreet Number (9-digit number).                                           |
| GCP               | GS1 Global Company Prefix.                                                             |
| GLN               | Global Location Number.                                                                |
| IN_COMPANY_ID     | India Company Identifier (alphanumeric).                                               |
| IN_LOCATION_ID    | India company location identifier (alphanumeric).                                      |
| KR_BUS_REG_NUMBER | Korea Business Registration Number (10 digits with format 000-00-0000).                |
| KR_PROVIDER_CODE  | Korea Provider Code (8-digit number).                                                  |
| UZ_TIN            | Uzbekistan Taxpayer Identification Number (9-digit number).                            |

# IdentifierType

Choose from one of the enumerators below:

| Data Code      | Description                                                                                                                                                                           |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BR_CNES        | Brazil National Registry of Health Facilities Number.                                                                                                                                 |
| BR_CNPJ        | Brazil Tax / Legal Entity ID (14 digits, with format 00.000.000/0001-00).                                                                                                             |
| BR_CPF         | Brazil Individual Taxpayer Registration Number (11 digits with format 000.000.000-00).                                                                                                |
| BR_PROF_REG    | Brazil Professional Registration Number.                                                                                                                                              |
| CN_NUMBER      | China business identifier registered with the CFDA.                                                                                                                                   |
| COMPANYID      | Internal company identifier (alphanumeric).                                                                                                                                           |
| COMPANYSITEID  | Internal location / plant / site identifier (alphanumeric).                                                                                                                           |
| CUIT           | Argentina Tax ID (11-digit with format 00-00000000-0).                                                                                                                                |
| DEA            | US Drug Enforcement Agency Number (9-digit number).                                                                                                                                   |
| DISTRIBUTOR    | Business is a distributor of pharmaceuticals.                                                                                                                                         |
| DUNS           | Dunn and Bradstreet Number (9-digit number).                                                                                                                                          |
| DUNS4          | Dunn and Bradstreet Number with 4-digit extension (13-digit number).                                                                                                                  |
| FINANCER       | Business is a financier / payer.                                                                                                                                                      |
| GCP            | GS1 Global Company Prefix (6- to 12-digit number).                                                                                                                                    |
| GLN            | Global Location Number (13-digit number).                                                                                                                                             |
| HEALTHCARE     | Business is a healthcare facility.                                                                                                                                                    |
| HIN            | Health Industry Number assigned by HIBCC (9-character alphanumeric).                                                                                                                  |
| IN_COMPANY_ID  | India Company Identifier (alphanumeric).                                                                                                                                              |
| IN_IEC         | India Importer Exporter Code (10-digit number).                                                                                                                                       |
| IN_LOCATION_ID | India company location identifier (alphanumeric).                                                                                                                                     |
| IN_PAN         | India Permanent Account Number (10-character alphanumeric, with format AAPL1234C, with the first five characters are letters, next four numerals, last check-digit character letter). |

| Data Code             | Description                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| IN_TIN                | India Taxpayer Identification Number (11-digit number).                                                                                       |
| KR_BUS_REG_NUMBER     | Korea Business Registration Number (10-digit number, with format 000-00-0000).                                                                |
| KR_PROVIDER_CODE      | Korea Provider Code (8-digit number).                                                                                                         |
| LOGISTICS             | Business is a third party logistics provider.                                                                                                 |
| MANUFACTURER          | Business is a manufacturer of pharmaceuticals.                                                                                                |
| PHARMACY              | Business is a pharmacy.                                                                                                                       |
| RU_ACCOUNT_NUMBER     | Russia Account Number.                                                                                                                        |
| RU_INN_FOREIGN_ENTITY | Russia Foreign Business Taxpayer Identification.                                                                                              |
| RU_INN_INDIV          | Russia Individual Taxpayer Identification Number.                                                                                             |
| RU_INN_KPP_TAX_CODE   | Russia KPP (supplementary tax registration ID numbers) Tax Identification Code.                                                               |
| RU_INN_LOCAL_ENTITY   | Russia Local Business Taxpayer Identification Number.                                                                                         |
| SGLN                  | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. First two segments contain only digits. |
| VAWD                  | Verified-Accredited Wholesale Distributors - Not used.                                                                                        |
| WHOLESALE             | Business is a wholesaler of pharmaceuticals.                                                                                                  |

## LocationIdType

Choose from one of the enumerators below:

| Data Code     | Description                                                              |
|---------------|--------------------------------------------------------------------------|
| CNPJ          | Brazil Tax ID for Legal Entities - Cadastro Nacional da Pessoa Jurídica. |
| COMPANYSITEID | Internal Location or Site Id in Internal ERP System.                     |
| CUIT          | Argentina Tax ID.                                                        |
| DEA           | Drug Enforcement Agency Number.                                          |
| DUNS          | Dun & Bradstreet Number.                                                 |
| DUNS4         | Dun & Bradstreet Number + 4-digit location code.                         |



| Data Code | Description                                                                                                                                 |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------|
| GCP       | GS1 Global Company Prefix (6- to 12-digit number).                                                                                          |
| GLN       | Global Location Number.                                                                                                                     |
| HIN       | Health Industry Number partner address ID.                                                                                                  |
| SGLN      | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. First 2 segments contain only digits. |

## LocationLookupId

Choose from one of the enumerators below:

| Data Code     | Description                                                                                                                                                                                                                                                                                                                                    |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BR_PROF_REG   | Brazil Professional Registration Number.                                                                                                                                                                                                                                                                                                       |
| CNES          | Brazil National Registry of Health Facilities Number.                                                                                                                                                                                                                                                                                          |
| CNPJ          | Brazil Tax / Legal Entity ID (14 digits with format 00.000.000/0001-00).                                                                                                                                                                                                                                                                       |
| COMPANYID     | <p>Internal company identifier (alphanumeric).</p> <div>  Only valid for the following messages: <ul style="list-style-type: none"> <li>Receipt (XML)</li> <li>Sales Shipment (XML)</li> <li>Take product Sample (EPCIS v1.2)</li> </ul> </div>               |
| COMPANYSITEID | Internal Location or Site Id in Internal ERP System.                                                                                                                                                                                                                                                                                           |
| CPF           | Brazil Individual Tax Payer ID.                                                                                                                                                                                                                                                                                                                |
| CUIT          | <p>Argentina Tax ID (11 digits with format 00-00000000-0).</p> <div>  Only valid for the following messages: <ul style="list-style-type: none"> <li>Receipt (XML)</li> <li>Sales Shipment (XML)</li> <li>Take product Sample (EPCIS v1.2)</li> </ul> </div> |

| Data Code         | Description                                                                                                                                                                                                                                                                                                                   |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DEA               | Drug Enforcement Agency Number.                                                                                                                                                                                                                                                                                               |
| DUNS4             | Dun & Bradstreet Number + 4-digit location code.                                                                                                                                                                                                                                                                              |
| GCP               | GS1 Global Company Prefix (6- to 12-digit number).                                                                                                                                                                                                                                                                            |
| GLN               | Global Location Number.                                                                                                                                                                                                                                                                                                       |
| HIN               | Health Industry Number partner address ID.                                                                                                                                                                                                                                                                                    |
| IN_COMPANY_ID     | <p>India Company Identifier (alphanumeric).</p> <div>  Only valid for the following messages: <ul style="list-style-type: none"> <li>Receipt (XML)</li> <li>Sales Shipment (XML)</li> <li>Take product Sample (EPCIS v1.2)</li> </ul> </div> |
| IN_LOCATION_ID    | India company location identifier (alphanumeric).                                                                                                                                                                                                                                                                             |
| KR_BUS_REG_NUMBER | Korea Business Registration Number (10 digits with format 000-00-0000).                                                                                                                                                                                                                                                       |
| KR_PROVIDER_CODE  | Korea Provider Code (8-digit number).                                                                                                                                                                                                                                                                                         |
| SGLN              | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. First 2 segments contain only digits.                                                                                                                                                                                   |

## MDBusinessPartyTypeAttributes

Choose from one of the enumerators below:

| Data Code                                                                                                   | Description                                                              |
|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <a href="http://epcis.gs1br.org/hc/cnes/loc/">http://epcis.gs1br.org/hc/cnes/loc/</a>                       | Brazil National Registry of Health Facilities Number.                    |
| <a href="http://epcis.gs1br.org/hc/cpf/loc/">http://epcis.gs1br.org/hc/cpf/loc/</a>                         | Brazil Individual Taxpayer ID Number - Cadastro de Pessoa Fisca.         |
| <a href="http://epcis.gs1br.org/hc/cnpj/loc/">http://epcis.gs1br.org/hc/cnpj/loc/</a>                       | Brazil Tax ID for Legal Entities - Cadastro Nacional da Pessoa Jurídica. |
| <a href="http://epcis.gs1br.org/hc/professionalReg/loc/">http://epcis.gs1br.org/hc/professionalReg/loc/</a> | Brazil Professional Registration Number.                                 |
| <a href="http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/">http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/</a>   | Informationsstelle für Arzneispezialitäten (IFA) Registration Number.    |

| Data Code                                                                                                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="http://epcis.gs1us.org/hc/dea/loc/">http://epcis.gs1us.org/hc/dea/loc/</a>                             | Drug Enforcement Agency Number.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <a href="http://epcis.gs1us.org/hc/duns/loc/">http://epcis.gs1us.org/hc/duns/loc/</a>                           | Dun & Bradstreet Number.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <a href="http://epcis.gs1us.org/hc/duns4/loc/">http://epcis.gs1us.org/hc/duns4/loc/</a>                         | <p>Dun &amp; Bradstreet Number + 4-digit Location Code.</p> <div>  Only valid for the following messages: <ul style="list-style-type: none"> <li>• Receive</li> <li>• Receive Event</li> <li>• Sales Shipment</li> <li>• Shipment Event</li> <li>• Take Product Sample</li> <li>• Take Product Sample Event</li> </ul> </div>                                                                 |
| <a href="http://epcis.gs1us.org/hc/duns_plus_four/loc/">http://epcis.gs1us.org/hc/duns_plus_four/loc/</a>       | <p>Dun &amp; Bradstreet Number + 4-digit Location Code.</p> <div>  Only valid for the following messages: <ul style="list-style-type: none"> <li>• End of Batch</li> <li>• End of Batch Event</li> <li>• Product Release</li> <li>• Product Release Event</li> <li>• Shipment</li> <li>• Shipment Event</li> <li>• Take Product Sample</li> <li>• Take Product Sample Event</li> </ul> </div> |
| <a href="http://epcis.gs1us.org/hc/hin/loc/">http://epcis.gs1us.org/hc/hin/loc/</a>                             | Health Industry Number partner address ID.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <a href="http://epcis.tracelink.com/hc/cuit/loc/">http://epcis.tracelink.com/hc/cuit/loc/</a>                   | Argentina Tax ID.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <a href="http://epcis.tracelink.com/hc/companyId/loc/">http://epcis.tracelink.com/hc/companyId/loc/</a>         | Company Id in the Internal ERP System.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <a href="http://epcis.tracelink.com/hc/companySiteId/loc/">http://epcis.tracelink.com/hc/companySiteId/loc/</a> | Internal Location or Site Id in the Internal ERP System.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <a href="http://epcis.tracelink.com/hc/gcp/loc/">http://epcis.tracelink.com/hc/gcp/loc/</a>                     | GS1 Global Company Prefix (6- to 12-digit number).                                                                                                                                                                                                                                                                                                                                                                                                                             |

| Data Code                                                | Description                                                                                                                                                                             |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| http://epcis.tracelink.com/hc/in_company_id/loc/         | India Company Identifier (alphanumeric).                                                                                                                                                |
| http://epcis.tracelink.com/hc/in_location_id/loc/        | India Company Location Identifier (alphanumeric).                                                                                                                                       |
| http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/     | Korea Business Registration Number (10-digit number, with format 000-00-00000).                                                                                                         |
| http://epcis.tracelink.com/hc/kr_provider_code/loc/      | Korea Provider Code (8-digit number).                                                                                                                                                   |
| http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/   | Russia Local Entity Party Code Type.                                                                                                                                                    |
| http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/ | Russia Foreign Entity Party Code Type.                                                                                                                                                  |
| http://epcis.tracelink.com/hc/ru_inn_indiv/loc/          | Russia Individual Party Code Type.                                                                                                                                                      |
| http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc    | Russia KPP (supplementary tax registration ID numbers) Tax Identification Code.                                                                                                         |
| http://epcis.tracelink.com/hc/ru_account_number/loc      | Russia Account Number.                                                                                                                                                                  |
| urn:epc:id:sgln:                                         | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. The first 2 segments contain only digits. GLN is not supported with a urn prefix. |

## MDPartyTypeAttributes

Choose from one of the following enumerators:

| Data Code                                     | Description                                                                                                                                                                                                                                                           |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| http://epcis.gs1br.org/hc/cnes/loc/           | Brazil National Registry of Health Facilities Number.                                                                                                                                                                                                                 |
| http://epcis.gs1br.org/hc/cnpj/loc/           | Brazil Tax ID for Legal Entities - Cadastro Nacional da Pessoa Jurídica.                                                                                                                                                                                              |
| http://epcis.gs1br.org/hc/cpf/loc/            | Brazil Individual Taxpayer ID Number - Cadastro de Pessoa Física.                                                                                                                                                                                                     |
| http://epcis.gs1us.org/hc/de_ifa_reg_num/loc/ | Informationsstelle für Arzneispezialitäten (IFA) Registration Number.                                                                                                                                                                                                 |
| http://epcis.gs1us.org/hc/dea/loc/            | Drug Enforcement Agency Number.                                                                                                                                                                                                                                       |
| http://epcis.gs1us.org/hc/duns/loc/           | Dun & Bradstreet Number.                                                                                                                                                                                                                                              |
| http://epcis.gs1us.org/hc/duns4/loc/          | Dun & Bradstreet Number + 4-digit Location Code.<br><div>  Only valid for the following messages:           <ul style="list-style-type: none"> <li>Receive Event</li> </ul> </div> |

| Data Code                                                                                                               | Description                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                         | <ul style="list-style-type: none"> <li>Sales Shipment Event</li> </ul>                                                                                                                                                                  |
| <a href="http://epcis.gs1us.org/hc/duns_plus_four/loc/">http://epcis.gs1us.org/hc/duns_plus_four/loc/</a>               | <p>Dun &amp; Bradstreet Number + 4-digit Location Code.</p> <p>⚠ Only valid for the following messages:</p> <ul style="list-style-type: none"> <li>End of Batch Event</li> <li>Product Release Event</li> <li>Shipment Event</li> </ul> |
| <a href="http://epcis.gs1us.org/hc/hin/loc/">http://epcis.gs1us.org/hc/hin/loc/</a>                                     | Health Industry Number partner address ID.                                                                                                                                                                                              |
| <a href="http://epcis.gs1br.org/hc/professionalReg/loc/">http://epcis.gs1br.org/hc/professionalReg/loc/</a>             | Brazil Professional Registration Number.                                                                                                                                                                                                |
| <a href="http://epcis.tracelink.com/hc/am_tin/loc/">http://epcis.tracelink.com/hc/am_tin/loc/</a>                       | Armenia Taxpayer Identification Number.                                                                                                                                                                                                 |
| <a href="http://epcis.tracelink.com/hc/by_tin/loc/">http://epcis.tracelink.com/hc/by_tin/loc/</a>                       | Belarus Taxpayer Identification Number.                                                                                                                                                                                                 |
| <a href="http://epcis.tracelink.com/hc/cn_foreign_mah/loc/">http://epcis.tracelink.com/hc/cn_foreign_mah/loc/</a>       | China Foreign MAH ID.                                                                                                                                                                                                                   |
| <a href="http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/">http://epcis.tracelink.com/hc/cn_foreign_mfr/loc/</a>       | China Foreign Manufacturer ID.                                                                                                                                                                                                          |
| <a href="http://epcis.tracelink.com/hc/cn_uscid/loc/">http://epcis.tracelink.com/hc/cn_uscid/loc/</a>                   | China Unified Social Credit Identifier.                                                                                                                                                                                                 |
| <a href="http://epcis.tracelink.com/hc/companyId/loc/">http://epcis.tracelink.com/hc/companyId/loc/</a>                 | Company Id in the Internal ERP System.                                                                                                                                                                                                  |
| <a href="http://epcis.tracelink.com/hc/companySiteId/loc/">http://epcis.tracelink.com/hc/companySiteId/loc/</a>         | Internal Location or Site Id in the Internal ERP System.                                                                                                                                                                                |
| <a href="http://epcis.tracelink.com/hc/cuit/loc/">http://epcis.tracelink.com/hc/cuit/loc/</a>                           | Argentina Tax ID.                                                                                                                                                                                                                       |
| <a href="http://epcis.tracelink.com/hc/gcp/loc/">http://epcis.tracelink.com/hc/gcp/loc/</a>                             | GS1 Global Company Prefix (6- to 12-digit number).                                                                                                                                                                                      |
| <a href="http://epcis.tracelink.com/hc/in_company_id/loc/">http://epcis.tracelink.com/hc/in_company_id/loc/</a>         | India Company Identifier (alphanumeric).                                                                                                                                                                                                |
| <a href="http://epcis.tracelink.com/hc/in_location_id/loc/">http://epcis.tracelink.com/hc/in_location_id/loc/</a>       | India Company Location Identifier (alphanumeric).                                                                                                                                                                                       |
| <a href="http://epcis.tracelink.com/hc/in_gstn/loc/">http://epcis.tracelink.com/hc/in_gstn/loc/</a>                     | India Goods and Services Tax ID.                                                                                                                                                                                                        |
| <a href="http://epcis.tracelink.com/hc/in_mfr/loc/">http://epcis.tracelink.com/hc/in_mfr/loc/</a>                       | India Manufacturer Code.                                                                                                                                                                                                                |
| <a href="http://epcis.tracelink.com/hc/in_mrch/loc/">http://epcis.tracelink.com/hc/in_mrch/loc/</a>                     | India Merchant Exporter Code.                                                                                                                                                                                                           |
| <a href="http://epcis.tracelink.com/hc/kg_tin/loc/">http://epcis.tracelink.com/hc/kg_tin/loc/</a>                       | Kyrgyzstan Taxpayer Identification Number.                                                                                                                                                                                              |
| <a href="http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/">http://epcis.tracelink.com/hc/kr_bus_reg_number/loc/</a> | Korea Business Registration Number (10-digit number, with format 000-00-0000).                                                                                                                                                          |

| Data Code                                                | Description                                                                                                                                                                               |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| http://epcis.tracelink.com/hc/kr_provider_code/loc/      | Korea Provider Code (8-digit number).                                                                                                                                                     |
| http://epcis.tracelink.com/hc/kz_bin/loc/                | Kazakhstan Business Identification Number.                                                                                                                                                |
| http://epcis.tracelink.com/hc/ru_account_number/loc      | Russia Account Number.                                                                                                                                                                    |
| http://epcis.tracelink.com/hc/ru_inn_foreign_entity/loc/ | Russia Foreign Entity Party Code Type.                                                                                                                                                    |
| http://epcis.tracelink.com/hc/ru_inn_indiv/loc/          | Russia Individual Party Code Type.                                                                                                                                                        |
| http://epcis.tracelink.com/hc/ru_inn_kpp_tax_code/loc    | Russia KPP (supplementary tax registration ID numbers) Tax Identification Code.                                                                                                           |
| http://epcis.tracelink.com/hc/ru_inn_local_entity/loc/   | Russia Local Entity Party Code Type.                                                                                                                                                      |
| urn:epc:id:sgln:                                         | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. The first two segments contain only digits. GLN is not supported with a urn prefix. |
| http://epcis.tracelink.com/hc/uz_tin/loc/                | Uzbekistan Tax Identification Number (9-digit number).                                                                                                                                    |

## MDPartyTypeEnums

Choose from the following enumerators:

| Data Code      | Description                                                              |
|----------------|--------------------------------------------------------------------------|
| BR_PROF_REG    | Brazil Professional Registration Number.                                 |
| BR_CNES        | Brazil National Registry of Health Facilities Number.                    |
| BR_CNPJ        | Brazil Tax ID for Legal Entities - Cadastro Nacional da Pessoa Jurídica. |
| COMPANYID      | Company Id in Internal ERP System.                                       |
| COMPANYSITEID  | Internal Location or Site Id in the Internal ERP System.                 |
| BR_CPF         | Brazil Individual Taxpayer ID Number - Cadastro de Pessoa Fisca.         |
| CUIT           | Argentina Tax ID.                                                        |
| DEA            | Drug Enforcement Agency Number.                                          |
| DE_IFA_REG_NUM | Informationsstelle für Arzneispezialitäten (IFA) Registration Number.    |
| DUNS           | Dun & Bradstreet Number.                                                 |

| Data Code         | Description                                                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| DUNS_PLUS_FOUR    | Dun & Bradstreet Number + 4-digit location code.                                                                                              |
| EIN               | Employer identification number.                                                                                                               |
| EAN13             | International Article Number 13-digit code.                                                                                                   |
| GCP               | GS1 Global Company Prefix (6- to 12-digit number).                                                                                            |
| GLN               | Global Location Number.                                                                                                                       |
| HIN               | Health Industry Number partner address ID.                                                                                                    |
| IN_COMPANY_ID     | India Company Identifier (alphanumeric).                                                                                                      |
| IN_LOCATION_ID    | India company location identifier (alphanumeric).                                                                                             |
| KR_BUS_REG_NUMBER | Korea Business Registration Number (10-digit number with format 000-00-0000).                                                                 |
| KR_PROVIDER_CODE  | Korea Provider Code (8-digit number).                                                                                                         |
| SGLN              | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. First two segments contain only digits. |

## MessagePartyIdType

Choose from one of the following enumerators:

| Data Code     | Description                                                              |
|---------------|--------------------------------------------------------------------------|
| BR_PROF_REG   | Brazil Professional Registration Number.                                 |
| BR_CNES       | Brazil National Registry of Health Facilities Number.                    |
| BR_CNPJ       | Brazil Tax ID for Legal Entities - Cadastro Nacional da Pessoa Juridica. |
| COMPANYID     | Company Id in Internal ERP System.                                       |
| COMPANYSITEID | Internal Location or Site Id in Internal ERP System.                     |
| BR_CPF        | Brazil Individual Taxpayer ID Number - Cadastro de Pessoa Fisca.         |
| CUIT          | Argentina Tax ID.                                                        |
| DEA           | Drug Enforcement Agency Number.                                          |
| DUNS          | Dun & Bradstreet Number.                                                 |

| Data Code         | Description                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DUNS4             | Dun & Bradstreet Number + 4-digit location code.                                                                                                                                                      |
| GCP               | GS1 Global Company Prefix (6- to 12-digit number).                                                                                                                                                    |
| GLN               | Global Location Number.                                                                                                                                                                               |
| HIN               | Health Industry Number partner address ID.                                                                                                                                                            |
| IN_IEC            | India Importer Exporter Code (10-digit number).                                                                                                                                                       |
| IN_PAN            | India Permanent Account Number (10-character alphanumeric, with format AAPL1234C, with the first five characters are letters, next four numerals, last character is a check- digit character letter). |
| IN_TIN            | India Taxpayer Identification Number (11-digit number).                                                                                                                                               |
| KR_BUS_REG_NUMBER | Korea Business Registration Number (10 digits with format 000-00-0000).                                                                                                                               |
| KR_PROVIDER_CODE  | Korea Provider Code (8-digit number).                                                                                                                                                                 |
| SGLN              | Serialized Global Location Number (for a sub-location) expressed as: [CompanyPrefix].[LocationRef].0. The first two segments contain only digits. GLN is not supported with a urn prefix.             |
| UZ_TIN            | Taxpayer Identification Number (9-digit number).                                                                                                                                                      |



# Company and information

## BusinessClassification

Choose from one of the enumerators below:

| Data Code                 | Description                                    |
|---------------------------|------------------------------------------------|
| CARRYING_FORWARDING_AGENT | Carrying Forwarding Agent.                     |
| CHEMIST                   | Chemist                                        |
| DISTRIBUTOR               | Business is a distributor of pharmaceuticals.  |
| EXPORTER                  | Exporter                                       |
| FINANCER                  | Business is a financier/payer.                 |
| HEALTHCARE                | Business is a healthcare facility.             |
| IMPORTER                  | Importer                                       |
| LOGISTICS                 | Business is a third party logistics provider.  |
| MANUFACTURER              | Business is a manufacturer of pharmaceuticals. |
| PACKAGER                  | Packager                                       |
| PHARMACY                  | Business is a pharmacy.                        |
| RETURNSPROCESSOR          | Returns Processor.                             |
| STOCKIST                  | Stockist                                       |
| WHOLESALE                 | Business is a wholesaler of pharmaceuticals.   |

## MDAttributes

Choose from one of the enumerators below:

| Data Code                                                                                                                                                       | Description                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalPartyIdentificationTypeCode</a>         | Additional party identifier type.                                                                                                                                                                                                                                                                                                                                                       |
| <a href="http://epcis.tracelink.com/mda/additionalPartyIdentificationValue">http://epcis.tracelink.com/mda/additionalPartyIdentificationValue</a>               | Additional party identifier.                                                                                                                                                                                                                                                                                                                                                            |
| <a href="http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode">http://epcis.tracelink.com/mda/additionalTradeItemIdentificationTypeCode</a> | Additional trade item identification type code TraceLink namespace.                                                                                                                                                                                                                                                                                                                     |
| <a href="http://epcis.tracelink.com/mda/AddressObjectGUID">http://epcis.tracelink.com/mda/AddressObjectGUID</a>                                                 | <p>The global identifier assigned by the Russian Federation Information Address System (FIAS).</p> <div>  Maximum 36 characters, using the digits 0-9 and letters A-F. </div> <div>  Mandatory for Russia. </div> |
| <a href="http://epcis.tracelink.com/mda/corporateFax">http://epcis.tracelink.com/mda/corporateFax</a>                                                           | Corporate fax number.                                                                                                                                                                                                                                                                                                                                                                   |
| <a href="http://epcis.tracelink.com/mda/district">http://epcis.tracelink.com/mda/district</a>                                                                   | District code.                                                                                                                                                                                                                                                                                                                                                                          |
| <a href="http://epcis.tracelink.com/mda/HouseGUID">http://epcis.tracelink.com/mda/HouseGUID</a>                                                                 | <p>The global House identifier assigned by the Russian Federation Information Address System (FIAS).</p> <div>  Maximum 36 characters, using the digits 0-9 and letters A-F. </div>                                                                                                                  |
| <a href="http://epcis.tracelink.com/mda/houseNumber">http://epcis.tracelink.com/mda/houseNumber</a>                                                             | Building, house, or unit number of the company. House numbers are usually only separated from the street address in China.                                                                                                                                                                                                                                                              |
| <a href="http://epcis.tracelink.com/mda/packageTypeCode">http://epcis.tracelink.com/mda/packageTypeCode</a>                                                     | Packaging level type code.                                                                                                                                                                                                                                                                                                                                                              |
| <a href="http://epcis.tracelink.com/mda/partyRoleCode">http://epcis.tracelink.com/mda/partyRoleCode</a>                                                         | Business classification for party role code.                                                                                                                                                                                                                                                                                                                                            |
| <a href="http://epcis.tracelink.com/mda/premisesCode">http://epcis.tracelink.com/mda/premisesCode</a>                                                           | Identifier representing a physical area within the company location (e.g. a location's second floor).                                                                                                                                                                                                                                                                                   |
| <a href="http://epcis.tracelink.com/mda/taxRegistrationCode">http://epcis.tracelink.com/mda/taxRegistrationCode</a>                                             | Tax registration code.                                                                                                                                                                                                                                                                                                                                                                  |
| <a href="http://epcis.tracelink.com/mda/township">http://epcis.tracelink.com/mda/township</a>                                                                   | Name of the township in which the company is located.                                                                                                                                                                                                                                                                                                                                   |
| <a href="http://epcis.tracelink.com/mda/village">http://epcis.tracelink.com/mda/village</a>                                                                     | Name of the village in which the company is located.                                                                                                                                                                                                                                                                                                                                    |
| <a href="urn:epcglobal:cbv:mda#additionalTradeItemIdentification">urn:epcglobal:cbv:mda#additionalTradeItemIdentification</a>                                   | Additional trade item identification value.                                                                                                                                                                                                                                                                                                                                             |
| <a href="urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode">urn:epcglobal:cbv:mda#additionalTradeItemIdentificationTypeCode</a>                   | Additional trade item identification type code GS1 namespace.                                                                                                                                                                                                                                                                                                                           |
| <a href="urn:epcglobal:cbv:mda#city">urn:epcglobal:cbv:mda#city</a>                                                                                             | Text specifying the name of the city.                                                                                                                                                                                                                                                                                                                                                   |
| <a href="urn:epcglobal:cbv:mda#countryCode">urn:epcglobal:cbv:mda#countryCode</a>                                                                               | The ISO 3166-1 alpha-2 code specifying the country for the address.                                                                                                                                                                                                                                                                                                                     |
| <a href="urn:epcglobal:cbv:mda#name">urn:epcglobal:cbv:mda#name</a>                                                                                             | The name of the location or party expressed in text.                                                                                                                                                                                                                                                                                                                                    |

| Data Code                                | Description                                                                                                                                                                                                      |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| urn:epcglobal:cbv:mda#postalCode         | Text specifying the postal code for an address.                                                                                                                                                                  |
| urn:epcglobal:cbv:mda#state              | One of the constituent units of a nation having a federal government.                                                                                                                                            |
| urn:epcglobal:cbv:mda#streetAddressOne   | The first free form line of an address. This first part is printed on paper as the first line below the name, e.g. the name of the street and the number in the street or the name of a building.                |
| urn:epcglobal:cbv:mda#streetAddressTwo   | The second free form line of an address. This second part is printed on paper as the second line below the name. The second free form line complements the first free form line to locate the party or location. |
| urn:epcglobal:cbv:mda#streetAddressThree | The third free form line of an address. This third part is printed on paper as the third line below the name. The third free form line complements the first and second free form lines where necessary.         |

# Country clearance

## CirculationReasonCode

Choose from the following enumerators:

| Data Code              | Description                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| COUNTERFEIT            | The product is a fraudulent imitation of the original.                                                                         |
| DAMAGED                | The product is damaged.                                                                                                        |
| EXCLUDED               | The product is not registered.                                                                                                 |
| EXPIRED                | The product is expired.                                                                                                        |
| FALSIFIED              | The document for the product is intentionally inaccurate.                                                                      |
| LOSTCONSUMERPROPERTIES | The product has lost its potency (e.g. due to exposure to light or being stored outside of the appropriate temperature range). |
| RECALLED               | The product is recalled.                                                                                                       |
| SUBSTANDARD            | The product does not meet physical or quality standards.                                                                       |
| UNFITFORCONSUMPTION    | The product cannot be safely consumed.                                                                                         |
| WITHDRAWN              | The Manufacturer or MAH has withdrawn the product from the market.                                                             |

## ClearanceTransactionId

Choose from one of the enumerators below:

| Data Code             | Description                |
|-----------------------|----------------------------|
| CERTIFICATECONFORMITY | Certificate of conformity. |
| DECLARATIONCONFORMITY | Declaration of conformity. |

# ClearanceType

Choose from one of the enumerators below:

| Data Code | Description                                                                                                |
|-----------|------------------------------------------------------------------------------------------------------------|
| CUSTOMS   | Customs declaration of goods that are being transferred between countries.                                 |
| TRADE     | Declaration of goods that are being transferred between countries that have a cooperative trade agreement. |

# Event actions

## ActionType

Choose from one of the enumerators below:

| Data Code | Description                                                                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADD       | The packing (aggregating) of child EPC(s) to a parent EPC. "Indicates the first event in a product's life cycle for an Object Event" according to EPCglobal standards.                |
| DELETE    | The unpacking/removing (disaggregating) of child EPC(s) from a parent EPC. "Indicates the last event in a product's life cycle for an Object Event" according to EPCglobal standards. |
| OBSERVE   | Observing the product through midlife while in the aggregation. "Indicates an event between beginning of life and end of life for an Object Event" according to EPCglobal standards.  |

# ISO codes

## ISOCountryCode

Choose from one of the enumerators below:

| Data Code | Description            |
|-----------|------------------------|
| AD        | ANDORRA                |
| AE        | UNITED ARAB EMIRATES   |
| AF        | AFGHANISTAN            |
| AG        | ANTIGUA AND BARBUDA    |
| AI        | ANGUILLA               |
| AL        | ALBANIA                |
| AM        | ARMENIA                |
| AN        | NETHERLANDS ANTILLES   |
| AO        | ANGOLA                 |
| AQ        | ANTARCTICA             |
| AR        | ARGENTINA              |
| AS        | AMERICAN SAMOA         |
| AT        | AUSTRIA                |
| AU        | AUSTRALIA              |
| AW        | ARUBA                  |
| AX        | ÅLAND ISLANDS          |
| AZ        | AZERBAIJAN             |
| BA        | BOSNIA AND HERZEGOVINA |

| Data Code | Description                           |
|-----------|---------------------------------------|
| BB        | BARBADOS                              |
| BD        | BANGLADESH                            |
| BE        | BELGIUM                               |
| BF        | BURKINA FASO                          |
| BG        | BULGARIA                              |
| BH        | BAHRAIN                               |
| BI        | BURUNDI                               |
| BJ        | BENIN                                 |
| BL        | SAINT BARTHÉLEMY                      |
| BM        | BERMUDA                               |
| BN        | BRUNEI DARUSSALAM                     |
| BO        | BOLIVIA, PLURINATIONAL STATE OF       |
| BR        | BRAZIL                                |
| BS        | BAHAMAS                               |
| BT        | BHUTAN                                |
| BV        | BOUVET ISLAND                         |
| BW        | BOTSWANA                              |
| BY        | BELARUS                               |
| BZ        | BELIZE                                |
| CA        | CANADA                                |
| CC        | COCOS (KEELING) ISLANDS               |
| CD        | CONGO, THE DEMOCRATIC REPUBLIC OF THE |
| CF        | CENTRAL AFRICAN REPUBLIC              |
| CG        | CONGO                                 |
| CH        | SWITZERLAND                           |



| Data Code | Description        |
|-----------|--------------------|
| CI        | CÔTE D'IVOIRE      |
| CK        | COOK ISLANDS       |
| CL        | CHILE              |
| CM        | CAMEROON           |
| CN        | CHINA              |
| CO        | COLOMBIA           |
| CR        | COSTA RICA         |
| CU        | CUBA               |
| CV        | CAPE VERDE         |
| CX        | CHRISTMAS ISLAND   |
| CY        | CYPRUS             |
| CZ        | CZECH REPUBLIC     |
| DE        | GERMANY            |
| DJ        | DJIBOUTI           |
| DK        | DENMARK            |
| DM        | DOMINICA           |
| DO        | DOMINICAN REPUBLIC |
| DZ        | ALGERIA            |
| EC        | ECUADOR            |
| EE        | ESTONIA            |
| EG        | EGYPT              |
| EH        | WESTERN SAHARA     |
| ER        | ERITREA            |
| ES        | SPAIN              |
| ET        | ETHIOPIA           |

| Data Code | Description                                  |
|-----------|----------------------------------------------|
| FI        | FINLAND                                      |
| FJ        | FIJI                                         |
| FK        | FALKLAND ISLANDS (MALVINAS)                  |
| FM        | MICRONESIA, FEDERATED STATES OF              |
| FO        | FAROE ISLANDS                                |
| FR        | FRANCE                                       |
| GA        | GABON                                        |
| GB        | UNITED KINGDOM                               |
| GD        | GRENADA                                      |
| GE        | GEORGIA                                      |
| GF        | FRENCH GUIANA                                |
| GG        | GUERNSEY                                     |
| GH        | GHANA                                        |
| GI        | GIBRALTAR                                    |
| GL        | GREENLAND                                    |
| GM        | GAMBIA                                       |
| GN        | GUINEA                                       |
| GP        | GUADELOUPE                                   |
| GQ        | EQUATORIAL GUINEA                            |
| GR        | GREECE                                       |
| GS        | SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS |
| GT        | GUATEMALA                                    |
| GU        | GUAM                                         |
| GW        | GUINEA-BISSAU                                |
| GY        | GUYANA                                       |

| Data Code | Description                       |
|-----------|-----------------------------------|
| HK        | HONG KONG                         |
| HM        | HEARD ISLAND AND MCDONALD ISLANDS |
| HN        | HONDURAS                          |
| HR        | CROATIA                           |
| HT        | HAITI                             |
| HU        | HUNGARY                           |
| ID        | INDONESIA                         |
| IE        | IRELAND                           |
| IL        | ISRAEL                            |
| IM        | ISLE OF MAN                       |
| IN        | INDIA                             |
| IO        | BRITISH INDIAN OCEAN TERRITORY    |
| IQ        | IRAQ                              |
| IR        | IRAN, ISLAMIC REPUBLIC OF         |
| IS        | ICELAND                           |
| IT        | ITALY                             |
| JE        | JERSEY                            |
| JM        | JAMAICA                           |
| JO        | JORDAN                            |
| JP        | JAPAN                             |
| KE        | KENYA                             |
| KG        | KYRGYZSTAN                        |
| KH        | CAMBODIA                          |
| KI        | KIRIBATI                          |
| KM        | COMOROS                           |

| Data Code | Description                                |
|-----------|--------------------------------------------|
| KN        | SAINT KITTS AND NEVIS                      |
| KP        | KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF     |
| KR        | KOREA, REPUBLIC OF                         |
| KW        | KUWAIT                                     |
| KY        | CAYMAN ISLANDS                             |
| KZ        | KAZAKHSTAN                                 |
| LA        | LAO PEOPLE'S DEMOCRATIC REPUBLIC           |
| LB        | LEBANON                                    |
| LC        | SAINT LUCIA                                |
| LI        | LIECHTENSTEIN                              |
| LK        | SRI LANKA                                  |
| LR        | LIBERIA                                    |
| LS        | LESOTHO                                    |
| LT        | LITHUANIA                                  |
| LU        | LUXEMBOURG                                 |
| LV        | LATVIA                                     |
| LY        | LIBYAN ARAB JAMAHIRIYA                     |
| MA        | MOROCCO                                    |
| MC        | MONACO                                     |
| MD        | MOLDOVA, REPUBLIC OF                       |
| ME        | MONTENEGRO                                 |
| MF        | SAINT MARTIN                               |
| MG        | MADAGASCAR                                 |
| MH        | MARSHALL ISLANDS                           |
| MK        | MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF |

| Data Code | Description              |
|-----------|--------------------------|
| ML        | MALI                     |
| MM        | MYANMAR                  |
| MN        | MONGOLIA                 |
| MO        | MACAO                    |
| MP        | NORTHERN MARIANA ISLANDS |
| MQ        | MARTINIQUE               |
| MR        | MAURITANIA               |
| MS        | MONTSERRAT               |
| MT        | MALTA                    |
| MU        | MAURITIUS                |
| MV        | MALDIVES                 |
| MW        | MALAWI                   |
| MX        | MEXICO                   |
| MY        | MALAYSIA                 |
| MZ        | MOZAMBIQUE               |
| NA        | NAMIBIA                  |
| NC        | NEW CALEDONIA            |
| NE        | NIGER                    |
| NF        | NORFOLK ISLAND           |
| NG        | NIGERIA                  |
| NI        | NICARAGUA                |
| NL        | NETHERLANDS              |
| NO        | NORWAY                   |
| NP        | NEPAL                    |
| NR        | NAURU                    |

| Data Code | Description                     |
|-----------|---------------------------------|
| NU        | NIUE                            |
| NZ        | NEW ZEALAND                     |
| OM        | OMAN                            |
| PA        | PANAMA                          |
| PE        | PERU                            |
| PF        | FRENCH POLYNESIA                |
| PG        | PAPUA NEW GUINEA                |
| PH        | PHILIPPINES                     |
| PK        | PAKISTAN                        |
| PL        | POLAND                          |
| PM        | SAINT PIERRE AND MIQUELON       |
| PN        | PITCAIRN                        |
| PR        | PUERTO RICO                     |
| PS        | PALESTINIAN TERRITORY, OCCUPIED |
| PT        | PORTUGAL                        |
| PW        | PALAU                           |
| PY        | PARAGUAY                        |
| QA        | QATAR                           |
| RE        | RÉUNION                         |
| RO        | ROMANIA                         |
| RS        | SERBIA                          |
| RU        | RUSSIAN FEDERATION              |
| RW        | RWANDA                          |
| SA        | SAUDI ARABIA                    |
| SB        | SOLOMON ISLANDS                 |

| Data Code | Description                                  |
|-----------|----------------------------------------------|
| SC        | SEYCHELLES                                   |
| SD        | SUDAN                                        |
| SE        | SWEDEN                                       |
| SG        | SINGAPORE                                    |
| SH        | SAINT HELENA, ASCENSION AND TRISTAN DA CUNHA |
| SI        | SLOVENIA                                     |
| SJ        | SVALBARD AND JAN MAYEN                       |
| SK        | SLOVAKIA                                     |
| SL        | SIERRA LEONE                                 |
| SM        | SAN MARINO                                   |
| SN        | SENEGAL                                      |
| SO        | SOMALIA                                      |
| SR        | SURINAME                                     |
| ST        | SAO TOME AND PRINCIPE                        |
| SV        | EL SALVADOR                                  |
| SY        | SYRIAN ARAB REPUBLIC                         |
| SZ        | SWAZILAND                                    |
| TC        | TURKS AND CAICOS ISLANDS                     |
| TD        | CHAD                                         |
| TF        | FRENCH SOUTHERN TERRITORIES                  |
| TG        | TOGO                                         |
| TH        | THAILAND                                     |
| TJ        | TAJIKISTAN                                   |
| TK        | TOKELAU                                      |
| TL        | TIMOR-LESTE                                  |

| Data Code | Description                          |
|-----------|--------------------------------------|
| TM        | TURKMENISTAN                         |
| TN        | TUNISIA                              |
| TO        | TONGA                                |
| TR        | TURKEY                               |
| TT        | TRINIDAD AND TOBAGO                  |
| TV        | TUVALU                               |
| TW        | TAIWAN                               |
| TZ        | TANZANIA, UNITED REPUBLIC OF         |
| UA        | UKRAINE                              |
| UG        | UGANDA                               |
| UM        | UNITED STATES MINOR OUTLYING ISLANDS |
| US        | UNITED STATES                        |
| UY        | URUGUAY                              |
| UZ        | UZBEKISTAN                           |
| VA        | HOLY SEE (VATICAN CITY STATE)        |
| VC        | SAINT VINCENT AND THE GRENADINES     |
| VE        | VENEZUELA, BOLIVARIAN REPUBLIC OF    |
| VG        | VIRGIN ISLANDS, BRITISH              |
| VI        | VIRGIN ISLANDS, U.S.                 |
| VN        | VIET NAM                             |
| VU        | VANUATU                              |
| WF        | WALLIS AND FUTUNA                    |
| WS        | SAMOA                                |
| XK        | KOSOVO                               |
| YE        | YEMEN                                |



| Data Code | Description  |
|-----------|--------------|
| YT        | MAYOTTE      |
| ZA        | SOUTH AFRICA |
| ZM        | ZAMBIA       |
| ZW        | ZIMBABWE     |

## ISOCurrency

Choose from one of the enumerators below:

| Data Code | Description                   |
|-----------|-------------------------------|
| AED       | UAE Dirham                    |
| AFN       | Afghani                       |
| ALL       | Lek                           |
| AMD       | Armenian Dram                 |
| ANG       | Netherlands Antillean Guilder |
| AOA       | Kwanza                        |
| ARS       | Argentine Peso                |
| AUD       | Australian Dollar             |
| AWG       | Aruban Florin                 |
| AZN       | Azerbaijani Manat             |
| BAM       | Convertible Mark              |
| BBD       | Barbados Dollar               |
| BDT       | Taka                          |
| BGN       | Bulgarian Lev                 |
| BHD       | Bahraini Dinar                |
| BIF       | Burundi Franc                 |

| Data Code | Description       |
|-----------|-------------------|
| BMD       | Bermudian Dollar  |
| BND       | Brunei Dollar     |
| BOB       | Boliviano         |
| BRL       | Brazilian Real    |
| BSD       | Bahamian Dollar   |
| BTN       | Ngultrum          |
| BWP       | Pula              |
| BYR       | Belarussian Ruble |
| BZD       | Belize Dollar     |
| CAD       | Canadian Dollar   |
| CDF       | Congolese Franc   |
| CHF       | Swiss Franc       |
| CLP       | Chilean Peso      |
| CNY       | Yuan Renminbi     |
| COP       | Colombian Peso    |
| CRC       | Costa Rican Colon |
| CUC       | Peso Convertible  |
| CUP       | Cuban Peso        |
| CVE       | Cabo Verde Escudo |
| CZK       | Czech Koruna      |
| DJF       | Djibouti Franc    |
| DKK       | Danish Krone      |
| DOP       | Dominican Peso    |
| DZD       | Algerian Dinar    |

| Data Code | Description            |
|-----------|------------------------|
| EGP       | Egyptian Pound         |
| ERN       | Nakfa                  |
| ETB       | Ethiopian Birr         |
| EUR       | Euro                   |
| FJD       | Fiji Dollar            |
| FKP       | Falkland Islands Pound |
| GBP       | Pound Sterling         |
| GEL       | Lari                   |
| GHS       | Ghana Cedi             |
| GIP       | Gibraltar Pound        |
| GMD       | Dalasi                 |
| GNF       | Guinea Franc           |
| GTQ       | Quetzal                |
| GYD       | Guyana Dollar          |
| HKD       | Hong Kong Dollar       |
| HNL       | Lempira                |
| HRK       | Kuna                   |
| HTG       | Gourde                 |
| HUF       | Forint                 |
| IDR       | Rupiah                 |
| ILS       | New Israeli Sheqel     |
| INR       | Indian Rupee           |
| IQD       | Iraqi Dinar            |
| IRR       | Iranian Rial           |

| Data Code | Description           |
|-----------|-----------------------|
| ISK       | Iceland Krona         |
| JMD       | Jamaican Dollar       |
| JOD       | Jordanian Dinar       |
| JPY       | Yen                   |
| KES       | Kenyan Shilling       |
| KGS       | Som                   |
| KHR       | Riel                  |
| KMF       | Comoro Franc          |
| KPW       | North Korean Won      |
| KRW       | Won                   |
| KWD       | Kuwaiti Dinar         |
| KYD       | Cayman Islands Dollar |
| KZT       | Tenge                 |
| LAK       | Kip                   |
| LBP       | Lebanese Pound        |
| LKR       | Sri Lanka Rupee       |
| LRD       | Liberian Dollar       |
| LSL       | Loti                  |
| LYD       | Libyan Dinar          |
| MAD       | Moroccan Dirham       |
| MDL       | Moldovan Leu          |
| MGA       | Malagasy Ariary       |
| MKD       | Denar                 |
| MMK       | Kyat                  |

| Data Code | Description        |
|-----------|--------------------|
| MNT       | Tugrik             |
| MOP       | Pataca             |
| MRO       | Ouguiya            |
| MUR       | Mauritius Rupee    |
| MVR       | Rufiyaa            |
| MWK       | Kwacha             |
| MXN       | Mexican Peso       |
| MYR       | Malaysian Ringgit  |
| MZN       | Mozambique Metical |
| NAD       | Namibia Dollar     |
| NGN       | Naira              |
| NIO       | Cordoba Oro        |
| NOK       | Norwegian Krone    |
| NPR       | Nepalese Rupee     |
| NZD       | New Zealand Dollar |
| OMR       | Rial Omani         |
| PAB       | Balboa             |
| PEN       | Nuevo Sol          |
| PGK       | Kina               |
| PHP       | Philippine Peso    |
| PKR       | Pakistan Rupee     |
| PLN       | Zloty              |
| PYG       | Guarani            |
| QAR       | Qatari Rial        |

| Data Code | Description            |
|-----------|------------------------|
| RON       | Romanian Leu           |
| RSD       | Serbian Dinar          |
| RUB       | Russian Ruble          |
| RWF       | Rwanda Franc           |
| SAR       | Saudi Riyal            |
| SBD       | Solomon Islands Dollar |
| SCR       | Seychelles Rupee       |
| SDG       | Sudanese Pound         |
| SEK       | Swedish Krona          |
| SGD       | Singapore Dollar       |
| SHP       | Saint Helena Pound     |
| SLL       | Leone                  |
| SOS       | Somali Shilling        |
| SRD       | Surinam Dollar         |
| SSP       | South Sudanese Pound   |
| STD       | Dobra                  |
| SVC       | El Salvador Colon      |
| SYP       | Syrian Pound           |
| SZL       | Lilangeni              |
| THB       | Baht                   |
| TJS       | Somoni                 |
| TMT       | Turkmenistan New Manat |
| TND       | Tunisian Dinar         |
| TOP       | Pa'anga                |

| Data Code | Description                |
|-----------|----------------------------|
| TRY       | Turkish Lira               |
| TTD       | Trinidad and Tobago Dollar |
| TWD       | New Taiwan Dollar          |
| TZS       | Tanzanian Shilling         |
| UAH       | Hryvnia                    |
| UGX       | Uganda Shilling            |
| USD       | US Dollar                  |
| UYU       | Peso Uruguayo              |
| UZS       | Uzbekistan Sum             |
| VEF       | Bolivar                    |
| VND       | Dong                       |
| VUV       | Vatu                       |
| WST       | Tala                       |
| XAF       | CFA Franc BEAC             |
| XCD       | East Caribbean Dollar      |
| XOF       | CFA Franc BCEAO            |
| XPF       | CFP Franc                  |
| YER       | Yemeni Rial                |
| ZAR       | Rand                       |
| ZMW       | Zambian Kwacha             |
| ZWL       | Zimbabwe Dollar            |

# Item and packaging codes

## CountryDrugCode

Choose from one of the enumerators below:

| Data Code              | Description                                                                           |
|------------------------|---------------------------------------------------------------------------------------|
| AT_PZN                 | Austria 13-digit PZN Code.                                                            |
| BE_ABP_CODE            | Belgium 16-digit ABP Code.                                                            |
| BG_NATIONAL_NUMBER     | Bulgaria National Drug Code.                                                          |
| BR_ANVISA_REGISTRATION | Brazil 13-digit ANVISA Drug Registration Code.                                        |
| CA_DIN                 | Canada 8-digit DIN Code.                                                              |
| CH_SWISSMEDIC          | Switzerland 13-digit Swissmedic Code.                                                 |
| CN_NDC                 | China National Drug Code.                                                             |
| CN_STANDARD            | China Drug Standard Code.                                                             |
| CN_SUBTYPE             | China 10-digit Subtype Code.                                                          |
| DE_PPN                 | Germany 12-digit PPN Code - Pharmacy Product Number.                                  |
| DE_PZN                 | Germany 7-digit PZN Code - Pharmazentralnummer.                                       |
| EAN13                  | International Article Number 13-digit Code.                                           |
| ES_CODIGO_NATIONAL     | Spain 13-digitCodigo National Code.                                                   |
| FR_CIP13               | France 13-digit CIP13 Code.                                                           |
| GR_EOF CODE            | Greece 9-digit EOF Code.                                                              |
| HR_NATIONAL_CODE       | Croatia 10-digit National Code.                                                       |
| IN_PRODUCT_CODE        | India 12-digit product code (based on the GTIN-14 with first and last digit removed). |
| IT_BOLLINO             | Italy 9-digit Bollino Code.                                                           |



| Data Code          | Description                                                                    |
|--------------------|--------------------------------------------------------------------------------|
| KR_KFDA_CODE       | Korea 13-digit KFDA Code.                                                      |
| LU_NATIONAL_NUMBER | Luxembourg National Drug Code.                                                 |
| NL_KNMP_CODE       | Netherlands KNMP 8-digit Code.                                                 |
| NRD_VNR_CODE       | Nordic Countries 6-digit VNR Code.                                             |
| PT_AIM             | Portugal 7-digit AIM Number.                                                   |
| SA_SAUDI_DRUG_CODE | Saudi Arabia 10-character alphanumeric Drug Code.                              |
| SUKL               | Czech Republic country drug code                                               |
| UK_AMPP            | United Kingdom National Drug Code.                                             |
| US_NDC442          | US 10-digit National Drug Code, may have hyphen separators at positions 4-4-2. |
| US_NDC532          | US 10-digit National Drug Code, may have hyphen separators at positions 5-3-2. |
| US_NDC541          | US 10-digit National Drug Code, may have hyphen separators at positions 5-4-1. |
| US_NDC542          | US 11-digit National Drug Code, may have hyphen separators at positions 5-4-2. |

## ItemCode

Choose from one of the enumerators below:

| Data Code  | Description                                       |
|------------|---------------------------------------------------|
| CN-RESCODE | China item number format.                         |
| GTIN-14    | GTIN-14 product code type.                        |
| NTIN       | National Trade Item Identifier product code type. |

# PackagingItemCodeType

Choose from one of the enumerators below:

| Data Code  | Description                      |
|------------|----------------------------------|
| CN_RESCODE | China RES Code.                  |
| GTIN_14    | GTIN-14.                         |
| NTIN       | National Trade Item Number.      |
| SSCC       | SSCC - GS1 Company Prefix Value. |

# Serial numbers

## Encoding

Choose from one of the enumerators below:

| Data Code     | Description                                                                                                                                                                                          |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AI(00)        | The bar code representation of an SSCC-18 number and the equivalent of the SSCC-96 scheme.                                                                                                           |
| AI(01)+AI(21) | The bar code representation of a serialized GTIN number and the equivalent of the SGTIN-96 scheme.                                                                                                   |
| AI(8003)      | Not currently used. The bar code equivalent of the GRAI schemes.                                                                                                                                     |
| CN-EDMC       | China number encoding format.                                                                                                                                                                        |
| GRAI-96       | Not currently used. A 96-bit encoding scheme for Global Returnable Asset Identifier.                                                                                                                 |
| GRAI-170      | Not currently used. A 170-bit encoding scheme for Global Returnable Asset Identifier.                                                                                                                |
| SGTIN-96      | Not currently used. A 96-bit encoding scheme for embedding EAN.UCC 685 System standard GTINs (Global Trade Identification Numbers) and EPCs (Electronic Product Codes) on 2D barcodes and RFID tags. |
| SGTIN-198     | Not currently used. A 198-bit encoding scheme for embedding EAN.UCC 685 System standard GTINs (Global Trade Identification Numbers) and EPCs (Electronic Product Codes) on barcodes and RFID tags.   |
| SSCC-96       | Not currently used. A 96-bit encoding scheme for embedding of EAN.UCC 897 System standard SSCCs (Serialized Shipping Container Codes) on 2D barcodes and RFID tags.                                  |

## EPC Pure Identifier Format Examples

The following examples are in EPC Pure Identity URI format:

**CN EDMC:** `http://epcis.tracelink.com/hc/cn-edmc/obj/[serial number]`

E.g. `http://epcis.tracelink.com/hc/cn-edmc/obj/88102301100002005943`

**NTIN:** `urn:epc:id:sgtin:[company prefix].[indicator digit][item ref].[serial number]`

E.g. `urn:epc:id:sgtin:415001647778.0.100000000022`

**SGTIN:** urn:epc:id:sgtin:[company prefix].[indicator digit + item reference].[serial number]

E.g. urn:epc:id:sgtin:068202.0401034.11220207026272

**SSCC:** urn:epc:id:sscc:[company prefix].[extension digit + serial number]

E.g. urn:epc:id:sscc:030944.10105363280

## FilterValue

Choose from one of the enumerators below:

| Data Code | Encoding Description | Description                                                                                                                                                                                                                                                                                |
|-----------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0         | filter-value-0       | Filter value associated with SGTIN or SSCC. This element is used in conjunction with the Application Identifier number, SGTIN, or SSCC number in the event the serial number needs to be translated into an alternate format for the customer system (e.g. GS1 HEX or GS1 Tag URI format). |
| 1         | filter-value-1       |                                                                                                                                                                                                                                                                                            |
| 2         | filter-value-2       |                                                                                                                                                                                                                                                                                            |
| 3         | filter-value-3       |                                                                                                                                                                                                                                                                                            |
| 4         | filter-value-4       |                                                                                                                                                                                                                                                                                            |
| 5         | filter-value-5       |                                                                                                                                                                                                                                                                                            |
| 6         | filter-value-6       |                                                                                                                                                                                                                                                                                            |
| 7         | filter-value-7       |                                                                                                                                                                                                                                                                                            |

## Format

Choose from one of the enumerators below:

| Data Code     | Description                                                                                         |
|---------------|-----------------------------------------------------------------------------------------------------|
| AI(00)        | The bar code representation of an SSCC-18 number, and the equivalent of the SSCC-96 scheme.         |
| AI(01)+AI(21) | The bar code representation of a serialized GTIN number, and the equivalent of the SGTIN-96 scheme. |

| Data Code | Description                                                                                                                                                                      |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AI(8003)  | The bar code equivalent of the GRAI schemes.                                                                                                                                     |
| CN-EDMC   | China number encoding format.                                                                                                                                                    |
| GRAI-96   | A 96-bit encoding scheme for Global Returnable Asset Identifier.                                                                                                                 |
| GRAI-170  | A 170-bit encoding scheme for Global Returnable Asset Identifier.                                                                                                                |
| SGTIN-96  | A 96-bit encoding scheme for embedding EAN.UCC 685 System standard GTINs (Global Trade Identification Numbers) and EPCs (Electronic Product Codes) on 2D barcodes and RFID tags. |
| SGTIN-198 | A 198-bit encoding scheme for embedding EAN.UCC 685 System standard GTINs (Global Trade Identification Numbers) and EPCs (Electronic Product Codes) on bar codes and RFID tags.  |
| SSCC-96   | A 96-bit encoding scheme for embedding EAN.UCC 897 System standard SSCCs (Serialized Shipping Container Codes) on 2D barcodes and RFID tags.                                     |

## Encoding

Choose from one of the enumerators below:

| Data Code     | Description                                                                                                                                                                                          |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AI(00)        | The bar code representation of an SSCC-18 number and the equivalent of the SSCC-96 scheme.                                                                                                           |
| AI(01)+AI(21) | The bar code representation of a serialized GTIN number and the equivalent of the SGTIN-96 scheme.                                                                                                   |
| AI(8003)      | Not currently used. The bar code equivalent of the GRAI schemes.                                                                                                                                     |
| CN-EDMC       | China number encoding format.                                                                                                                                                                        |
| GRAI-96       | Not currently used. A 96-bit encoding scheme for Global Returnable Asset Identifier.                                                                                                                 |
| GRAI-170      | Not currently used. A 170-bit encoding scheme for Global Returnable Asset Identifier.                                                                                                                |
| SGTIN-96      | Not currently used. A 96-bit encoding scheme for embedding EAN.UCC 685 System standard GTINs (Global Trade Identification Numbers) and EPCs (Electronic Product Codes) on 2D barcodes and RFID tags. |
| SGTIN-198     | Not currently used. A 198-bit encoding scheme for embedding EAN.UCC 685 System standard GTINs (Global Trade Identification Numbers) and EPCs (Electronic Product Codes) on barcodes and RFID tags.   |
| SSCC-96       | Not currently used. A 96-bit encoding scheme for embedding of EAN.UCC 897 System standard SSCCs (Serialized Shipping Container Codes) on 2D barcodes and RFID tags.                                  |

# Shipment and receipt

## ActionCode

Choose from one of the enumerators below:

| Data Code      | Description                                                                                          |
|----------------|------------------------------------------------------------------------------------------------------|
| CUSTOMSTRANSIT | The product is being transported through the importing to country but will not be distributed there. |
| DESTRUCTION    | The shipment is designated for destruction.                                                          |
| DOMESTIC       | The shipment is granted clearance to be sold and consumed domestically.                              |
| EXPORT         | This shipment contains domestic or local products and is sent to another country.                    |
| REFUSAL        | The shipment is refused clearance by the regulatory customs authority.                               |
| REEXPORT       | The shipment contains products already imported into the country and is sent to another country.     |

## ContractType

Choose from one of the enumerators below:

| Data Code                | Description                                                                            |
|--------------------------|----------------------------------------------------------------------------------------|
| AgencySalesAgreement     | An agent performs both legal actions and paid services for a manufacturer or supplier. |
| CommissionSalesAgreement | A sales agent earns commission for facilitating trade for an exporting company.        |
| CompetitiveBid           | Sold under private contract.                                                           |
| ConsignmentAgreement     | The buyer pays the manufacturer or supplier only when the product is sold.             |
| GovernmentContract       | Product is sold under a government state contract.                                     |
| PrivateContract          | Sold under competitive bid contract.                                                   |

## FundingSource

Choose from one of the enumerators below:

| Data Code           | Description                                                 |
|---------------------|-------------------------------------------------------------|
| FederalBudgetFunds  | Federal government funds are used to purchase the shipment. |
| OwnFunds            | The company's own funds are used to purchase the shipment.  |
| RegionalBudgetFunds | State or regional funds are used to purchase the shipment.  |

## ReceiptDistributionType

Choose from one of the enumerators below:

| Data Code         | Description                                  |
|-------------------|----------------------------------------------|
| IMPORTPURCHASE    | Purchase made into one country from another. |
| IMPORTRETURN      | Return made into one country from another.   |
| IMPORTTRANSFER    | Transfer made into one country from another. |
| INCOUNTRYPURCHASE | Purchase made within the same country.       |
| INCOUNTRYRETURN   | Return made within the same country.         |
| INCOUNTRYTRANSFER | Transfer made within the same country.       |

## SalesDistType

Choose from one of the enumerators below:

| Data Code    | Description                                                                            |
|--------------|----------------------------------------------------------------------------------------|
| EXPORTRETURN | A shipment for a return of goods to the supplier, shipped from one country to another. |
| EXPORTSALE   | A sale and distribution made from one country to another.                              |

| Data Code         | Description                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EXPORTTRANSFER    | A transfer within a company or with a partner such as 3PL or contract manufacturer/packager, made from one country to another. Includes intra-company warehouse transfer of goods, transfers between Pharmaceutical Manufacturer and 3PL, transfers between Pharmaceutical Manufacturer and CMO/CPO, transfers between CMO/CPO and 3PL of Pharmaceutical Manufacturer.   |
| INCOUNTRYRETURN   | A shipment for a return of goods to the supplier, shipped within the same country.                                                                                                                                                                                                                                                                                       |
| INCOUNTRYSALE     | A sale and distribution made within the same country.                                                                                                                                                                                                                                                                                                                    |
| INCOUNTRYTRANSFER | A transfer within a company or with a partner such as 3PL or contract manufacturer/ packager, occurring within the same country. Includes intra-company warehouse transfer of goods, transfers between Pharmaceutical Manufacturer and 3PL, transfers between Pharmaceutical Manufacturer and CMO/CPO, transfers between CMO/CPO and 3PL of Pharmaceutical Manufacturer. |

## SalesDistType (Receipt)

Choose from one of the enumerators below:

| Data Code         | Description                                  |
|-------------------|----------------------------------------------|
| IMPORTPURCHASE    | Purchase made into one country from another. |
| IMPORTRETURN      | Return made into one country from another.   |
| IMPORTTRANSFER    | Transfer made into one country from another. |
| INCOUNTRYPURCHASE | A purchase made within the same country.     |
| INCOUNTRYRETURN   | A return made within the same country.       |
| INCOUNTRYTRANSFER | A transfer made within the same country.     |

## SupplyType

Choose from one of the enumerators below:

| Data Code                            | Description                                                                                            | Ship From or Ship To Country |
|--------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------|
| AgencyOrderedDestructionDistribution | Return of a product for destruction as ordered by a government agency.                                 | Russia                       |
| CivilProtectionEmergencyDistribution | Distribution of product to authorized parties (e.g. police) for civil protection and disaster control. | EU FMD Countries             |
| ClinicalTrial                        | Supply for a clinical trial.                                                                           | India                        |



| Data Code                                | Description                                                                                                                                      | Ship From or Ship To Country          |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Collection                               | Return of recalled product.                                                                                                                      | Not mandatory for a specific country. |
| ContractManufacturerBuyback              | A return sale back to the contract manufacturer.                                                                                                 | Russia                                |
| CourtOrderedDestructionDistribution      | Return of product for court-ordered destruction.                                                                                                 | Russia                                |
| CustomsClearanceDistribution             | Product is received into an importer's warehouse after customs clearance.                                                                        | Russia                                |
| CustomsSale                              | Sale of product previously seized by a customs agency.                                                                                           | Russia                                |
| CustomsZoneTransfer                      | Product is transferred between customs zones.                                                                                                    | Russia                                |
| DentalPractitionerDistribution           | Distribution of product to a dental practitioner.                                                                                                | EU FMD Countries                      |
| DestructionDistribution                  | Return of product for company-initiated destruction.                                                                                             | Russia                                |
| Donation                                 | Distribution of product for donation.                                                                                                            | South Korea                           |
| EmergencyMedicalPractitionerDistribution | Distribution of product to a paramedic or emergency medical practitioner.                                                                        | EU FMD Countries                      |
| ExemptedDispenser                        | Suppliers mark a product as Dispensed before a dispenser receives it.                                                                            | Russia                                |
| FreeOfChargeDistribution                 | Free sales that are neither Donations nor Sample Distributions.                                                                                  | Russia                                |
| MedicalCareDistribution                  | Distribution to a hospital, clinic, or health center.                                                                                            | South Korea                           |
| MedicalPractitionerDistribution          | Distribution of product to a doctor or other medical practitioner.                                                                               | EU FMD Countries                      |
| MilitaryDistribution                     | Distribution of product to the military.                                                                                                         | South Korea                           |
| OpticalPractitionerDistribution          | Distribution of product to an optometrist or optician.                                                                                           | EU FMD Countries                      |
| PatientDistribution                      | Distribution of product to a patient.                                                                                                            | South Korea                           |
| PrisonDistribution                       | Distribution of product to a prison.                                                                                                             | EU FMD Countries                      |
| ProviderDistribution                     | Distribution of product to a provider.                                                                                                           | South Korea                           |
| ReExportDistribution                     | Product that is produced in Country A, and then imported into and subsequently re-exported from Country B.                                       | Russia                                |
| ReExportEmbargoDistribution              | Product that is produced in Country A, and then imported into and subsequently re-exported from Country B due to an embargo placed on a product. | Russia                                |
| ReExportSanctionsDistribution            | Product that is produced in Country A, and then imported into and subsequently re-exported from Country B due to imposed sanctions.              | Russia                                |
| ResearchUniversityDistribution           | Distribution of product to a research institution (e.g. universities that perform research).                                                     | EU FMD Countries                      |
| SafetyLifeReservesDistribution           | Distribution of product to a retail pharmacy.                                                                                                    | South Korea                           |

| Data Code                      | Description                                                         | Ship From or Ship To Country     |
|--------------------------------|---------------------------------------------------------------------|----------------------------------|
| SampleDistribution             | Distribution of product as free samples.                            | South Korea                      |
| SchoolDistribution             | Distribution of product to a school.                                | EU FMD Countries                 |
| SpecialMedicalCareDistribution | Distribution of product to a nursing home or hospice.               | South Korea and EU FMD Countries |
| VeterinaryDistribution         | Distribution of product to a veterinarian or a veterinary retailer. | EU FMD Countries                 |
| WithdrawnProductCollection     | Withdrawn goods are collected and returned to the manufacturer.     | Russia                           |

# Status update

## DestructionMethod

Choose from one of the enumerators below:

| Data Code                | Description                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------|
| INCINERATION             | The product is consumed in an incinerator.                                                       |
| LIQUID_DILUTION_DRAINAGE | The ampoule is crushed, and the liquid product is diluted and discharged into industrial sewers. |
| SOLID_DILUTION_DISCHARGE | The solid product is crushed, diluted, and discharged into industrial sewers.                    |

# DestroyReasonCode

Choose from one of the enumerators below:

| Data Code              | Description                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------|
| DAMAGED                | Product that has been damaged.                                                                        |
| DEFECTIVE              | Product that is defective.                                                                            |
| DISPENSED              | Product that has been dispensed.                                                                      |
| DISPOSED               | Product that has been disposed of and thus removed from the supply chain.                             |
| EXPIRY                 | Product that contains a passed expiration date.                                                       |
| MISPLACED              | Product that has been misplaced or lost and thus removed from the supply chain.                       |
| RECALL                 | Product that has been recalled.                                                                       |
| REPACKAGED             | Product that has been repackaged.                                                                     |
| SAMPLED                | Product that has been sampled (not by regulatory authorities) and thus removed from the supply chain. |
| SAMPLED_BY_AUTHORITIES | Product that was sampled by regulatory authorities and thus removed from the supply chain.            |
| STOLEN                 | Product that has been reported as stolen.                                                             |
| WITHDRAWN              | Product that has been withdrawn from the supply chain.                                                |

## DecommissionReasonCode

Choose from one of the enumerators below:

| Data Code | Description                                                               |
|-----------|---------------------------------------------------------------------------|
| DAMAGED   | Product that has been damaged.                                            |
| DEFECTIVE | The product does not function as intended.                                |
| DISPENSED | Product that has been dispensed.                                          |
| DISPOSED  | Product that has been disposed of and thus removed from the supply chain. |

| Data Code                  | Description                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------------------|
| EXPIRED                    | Product's expiration date has passed.                                                                           |
| EXPIRY                     | Product that contains a passed expiration date.                                                                 |
| INAPPROPRIATELY_STORED     | The product has been stored improperly and is no longer fit for sale.                                           |
| MISPLACED                  | Product that has been misplaced or lost and thus removed from the supply chain.                                 |
| OTHER                      | Other reason for the product being decommissioned.                                                              |
| QUALITY_RELEASED           | Product that has been released by quality assurance.                                                            |
| RECALL                     | Product that has been recalled.                                                                                 |
| REPACKAGED                 | Product that has been repackaged.                                                                               |
| RETURNED                   | The product has been returned and cannot be resold.                                                             |
| SAMPLED                    | Product that has been sampled (not by regulatory authorities) and thus removed from the supply chain.           |
| SAMPLED_ARCHIVAL           | The product is sampled to store as a record.                                                                    |
| SAMPLED_BY_AUTHORITIES     | Product that was sampled by regulatory authorities and thus removed from the supply chain.                      |
| SAMPLED_CLINICAL_STUDY     | The product is sampled for a clinical study.                                                                    |
| SAMPLED_CUSTOMS_CONTROL    | The product is sampled for inspection control by customs authorities.                                           |
| SAMPLED_FEDERAL_INSPECTION | The product is sampled for federal inspection.                                                                  |
| SAMPLED_MARKETING_DEMO     | The product is used in a marketing demonstration.                                                               |
| SAMPLED_PHARMA_STUDY       | The product is sampled for a post-registration pharmaceutical study, to support submitted changes to a dossier. |
| SAMPLED_SELECTIVE_CONTROL  | The product is sampled by health authorities as needed to ensure quality standards.                             |
| SPOILAGE                   | The product is spoiled due to exposure (e.g. heat, oxygen, moisture, microorganisms).                           |
| STOLEN                     | Product that has been reported as stolen.                                                                       |
| WITHDRAWN                  | Product that has been withdrawn from the supply chain.                                                          |
| WITHDRAWN_EXPERIMENT       | The product is withdrawn from the market during the course of an experiment.                                    |

# ReasonCode

Choose from one of the enumerators below:

| Data Code       | Description                                                                            |
|-----------------|----------------------------------------------------------------------------------------|
| INCORRECTSTATUS | Product that reflects the incorrect SerialNumberStatus and therefore will be modified. |
| STATUSUPDATE    | Product that is changing its status.                                                   |

# ReasonCodes

Choose from one of the enumerators below:

| Data Code         | Description                                    |
|-------------------|------------------------------------------------|
| Correction        | Shipment to be corrected.                      |
| Damaged           | Product that has been damaged.                 |
| DamagedInFacility | Product that has been damaged in the facility. |
| DamagedInTransit  | Product that has been damaged in transit.      |
| DataIssue         | Product with a data issue.                     |
| Destroyed         | Product that has been destroyed.               |
| Expired           | Product that is expired.                       |
| FoundInventory    | Inventory that has been found.                 |
| Investigation     | Product that is under investigation.           |
| LostInventory     | Inventory that is lost.                        |
| OrderCancelled    | Order that has been cancelled.                 |
| OrderRejected     | Order that has been rejected.                  |
| Other             | Other.                                         |
| OverReceipt       | Product with an over receipt.                  |
| OverShip          | Product with an over shipment.                 |
| PhysicalCount     | Product that has a physical count issue.       |
| Recalled          | Product that has been recalled.                |
| ReceivingError    | Product with a receiving error.                |
| ShippingError     | Product with a shipping error.                 |
| ShortReceipt      | Product with a short receipt.                  |
| ShortShip         | Product with a short ship.                     |

# TakeSampleReasonCode

Choose from one of the enumerators below:

| Data Code          | Description                                                                             |
|--------------------|-----------------------------------------------------------------------------------------|
| ARCHIVAL           | The product is sampled to store as a record.                                            |
| CONFORMITY_CONTROL | The product is sampled by health authorities when imported to ensure quality standards. |
| SELECTIVE_CONTROL  | The product is sampled by health authorities as needed to ensure quality standards.     |



# Transaction identifiers

# TransactionId

Choose from one of the enumerators below:

| Data Code              | Description                                                                                                                                        |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| ASN                    | Shipment Notification Number.                                                                                                                      |
| BOL                    | Bill of Lading Number. A carrier-issued document that serves as a shipment receipt once the product is delivered to the predetermined destination. |
| DESTRUCTION            | Destruction Order Number.                                                                                                                          |
| EWAY                   | E-Way Bill Number.                                                                                                                                 |
| INVOICE                | Invoice Number.                                                                                                                                    |
| NOTA_FISCAL_ELETRONICA | Nota fiscal eletrônica (used in Brazil, populated with nota fiscal document number and series code in format: 987654321.99999999).                 |
| OTHER                  | Other identifier.                                                                                                                                  |
| PACKSLIP               | Packing Slip Number.                                                                                                                               |
| PO                     | Purchase Order Number.                                                                                                                             |
| PRONUMBER              | Transportation carrier progressive number.                                                                                                         |
| REMOVAL                | Removal from circulation.                                                                                                                          |
| RETURN                 | Return Authorization Number.                                                                                                                       |
| SALESORDER             | Sales Order Number.                                                                                                                                |
| TRANSFER_NUMBER        | Transfer Order.                                                                                                                                    |

## TransactionId (Inbound)

Choose from one of the enumerators below:

| Data Code                                                                                                 | Description        |
|-----------------------------------------------------------------------------------------------------------|--------------------|
| <a href="http://epcis.tracelink.com/hc/btt/destruction">http://epcis.tracelink.com/hc/btt/destruction</a> | Destruction Order. |
| <a href="http://epcis.tracelink.com/hc/btt/eway">http://epcis.tracelink.com/hc/btt/eway</a>               | E-Way Bill Number. |

| Data Code                                              | Description                                      |
|--------------------------------------------------------|--------------------------------------------------|
| http://epcis.tracelink.com/hc/btt/notafiscaleletronica | Brazil Nota Fiscal Eletronica.                   |
| http://epcis.tracelink.com/hc/btt/other                | Other Document Type.                             |
| http://epcis.tracelink.com/hc/btt/packslip             | Packing Slip.                                    |
| http://epcis.tracelink.com/hc/btt/pronumber            | Transportation Carrier Progressive Number.       |
| http://epcis.tracelink.com/hc/btt/salesorder           | Sales Order.                                     |
| http://epcis.tracelink.com/hc/btt/transfer             | Transfer Order Number.                           |
| urn:epcglobal:cbv:btt:bol                              | Bill Of Lading.                                  |
| urn:epcglobal:cbv:btt:desadv                           | Shipment Notification Number or Delivery Number. |
| urn:epcglobal:cbv:btt:inv                              | Invoice Number.                                  |
| urn:epcglobal:cbv:btt:pedigree                         | Pedigree Transaction History.                    |
| urn:epcglobal:cbv:btt:po                               | Purchase Order Number.                           |
| urn:epcglobal:cbv:btt:poc                              | Purchase Order Confirmation.                     |
| urn:epcglobal:cbv:btt:prodorder                        | Production Order.                                |
| urn:epcglobal:cbv:btt:recadv                           | Receiving Advice.                                |
| urn:epcglobal:cbv:btt:rma                              | Return Authorization Order.                      |

## TransactionId (Outbound)

Choose from one of the enumerators below:

| Data Code             | Description                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| ASN                   | Shipment Notification Number.                                                                                                                      |
| BOL                   | Bill of Lading Number. A carrier-issued document that serves as a shipment receipt once the product is delivered to the predetermined destination. |
| CERTIFICATECONFORMITY | Certificate of conformity.                                                                                                                         |
| DECLARATIONCONFORMITY | Declaration of conformity.                                                                                                                         |
| DESTRUCTION           | Destruction Document Number.                                                                                                                       |

| Data Code            | Description                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------|
| EWAY                 | E-Way Bill Number.                                                                                                                 |
| INVOICE              | Invoice Number.                                                                                                                    |
| NOTAFISCALELETRONICA | Nota fiscal eletrônica (used in Brazil, populated with nota fiscal document number and series code in format: 987654321.99999999). |
| OTHER                | A document type that is outside of existing descriptions/data codes.                                                               |
| PACKSLIP             | Packing Slip Number.                                                                                                               |
| PO                   | Purchase Order Number.                                                                                                             |
| RETURN               | Return Authorization Number.                                                                                                       |
| SALESORDER           | Sales Order Number.                                                                                                                |
| TRANSFER             | Transfer Order Number.                                                                                                             |