Delivery Message

papiNet Standard - Version 2.31

Documentation

Global Standard for the Paper and Forest Products Supply Chain

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DeliveryMessage Documentation

An Overview of the Delivery Message

The Delivery Message specifies the details of a delivery that is either being despatched or will be despatched at a later time. The Delivery Message Type controls the usage of the delivery message. A seller can send a delivery message to one or more receivers, including the ship-to and/or buyer parties. Delivery messages are also sent to and from logistics partners.

The delivery message is used as a response to Call Off, Delivery Instruction and Loading Instruction messages when a delivery from a warehouse is requested. A delivery message fulfils the same or similar role as a delivery note, manifest, weight list, tally sheet, advanced shipping notice, loading order, or packing specification.

The Scope of the Delivery Message

The delivery message includes:

- The date on which goods were despatched or will be ready for despatch to a single ship-to party.
- Consignment details such as purchase order, product, package information, and weights.
- Tracking details such as the route of delivery.
- One or more DeliveryLeg(s) specifying the delivery route. Each DeliveryLeg may include transport information that details the mode, vehicle, unit, and loading information.

Using this information, the receiver can:

- Begin the customs clearance process, for international shipments.
- Prepare for receipt of goods.
- Reconcile the physically delivered goods with those reported.
- Reconcile the list of delivered goods with the invoice for those goods.
- Update stock records

A delivery message cannot be used to return goods to the seller.

Business Rules for DeliveryMessage

General Business Rules

Identifier	Business Rule
DEL001	[obsolete]
DEL002	A DeliveryMessage can have only one ShipToParty.
DEL003	[obsolete]

DEL004	[obsolete]
DEL005	[obsolete]
DEL006	[obsolete]
DEL007	[obsolete]
DEL008	In the case of a mixed pallet with multiple products from different PurchaseOrderLineItem(s), the same pallet identifier can be included in multiple DeliveryMessageLineItem(s).
DEL009	[obsolete]
DEL010	[obsolete]
DEL011	See the following sections for different message types.
DEL012	PackageInformation is a hierarchy that represents package details. For example, box, pallet, reel, sheet, etc. Each level has an identifier field used to specify the identifier of the item according to a defined numbering schemes.
DEL013	Delivery messages must be processed in ascending date time order using DeliveryMessageDate to ensure the correct processing of replacements and/or cancellations.
DEL014	If the sender sets the DeliveryMessageStatusType attribute to "Replaced" or "Cancelled", the OriginalDeliveryNumber must be present in DeliveryMessageReference.
DEL015	When InstructionByType is ByMillOrder then DeliveryMessageReference OrderNumber AssignedBy Mill and MillCharacteristics are mandatory on delivery message line item.
DEL016	When InstructionByType is ByPurchaseOrder PurchaseOrderInformation is mandatory on delivery message line item then Buyer should be defined by BuyerParty or OtherParty.

| DEL017 | When InstructionByType is ByProduct then Product is mandatory on delivery message line item. |
| DEL018 | SenderParty and ReceiverParty in delivery message header are mandatory, by business rule. (In order to maintain compatability with earlier versions of the standard the schema has not been updated to enforce this rule, at this time. |

Business Rules for DeliveryMessageType equal to DeliveryMessage

Identifier	Business Rule
DEL011a	PackageInformation is required for a DeliveryMessage.

Business Rules for DeliveryMessageType equal to InitialShipmentAdvice

Identifier	Business Rule
DEL011b	PackageInformation is optional for an InitialShipmentAdvice

Business Rules for DeliveryMessageType equal to LoadedSpecification

Identifier	Business Rule
DEL011c	PackageInformation is required for a LoadedSpecification.

Business Rules for DeliveryMessageType equal to InitialShipmentAdvice

Identifier	Business Rule
DEL011d	PackageInformation is required for a ShipmentAdvice.

Processing the Delivery Message

Delivery Message processing depends on the value in the status field at the message root level. There is only one status field, DeliveryMessageStatusType, at the message root level. All delivery message types are processed in the same way.

Status Values Used When Processing the Delivery Message

The following DeliveryMessageStatusType attributes are used at the

DeliveryMessage level:

- Original - The message information is the first version of that information.
- Cancelled - The supplied information is cancelled. Items that have been cancelled are not included in Totals on the Summary levels of the message.
- Replaced - The supplied information is replacing earlier supplied information. The receiver should revalidate the information in their system based upon the entire information received.

DeliveryMessage Structure
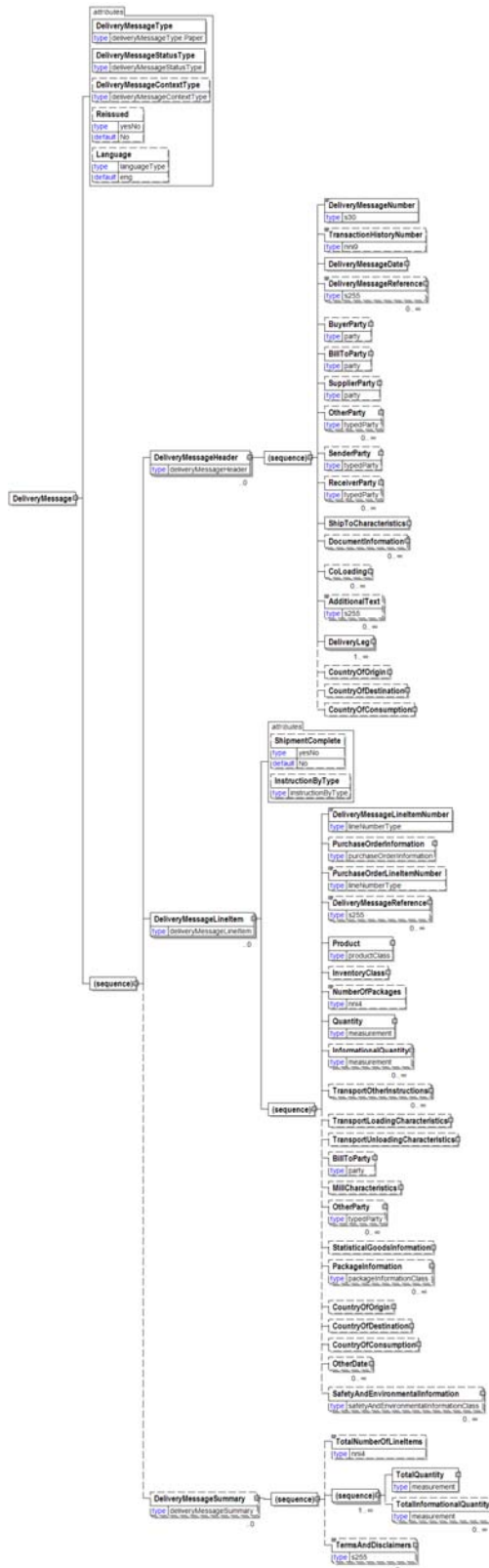
Understanding the Diagrams and Content

This section provides an explantion of the graphical view and descriptive content associated with the schema structures.

- The graphics contain elements, attributes, content model indicators, cardinality indicators, and data type information.
- Associated with each graphic are the definitions for the parent item and any associated child items. All attributes are listed first, followed by the elements.
- Children are grouped together using, what is termed, a content model.
- Cardinality is communicated for each item.

Let's use the following sample graphic as an explanatory vehicle. This graphic displays a parent element that has four elements and two attributes.

Elements:
Elements are displayed using a simple rectangle.

- A required element has a solid outline.
- An optional element has a dashed outline.
- Repeatability is shown via a multip-page outline along with an indication of the repeatability in the bottom right-hand side of the element.
- If the element permits the entry of textual content three-horizontal lines appear in the upper left-hand corner (See, "OptionalMultiple").
- The element's data-type is displayed below the element name. (In addition a default value, if it exists, can be shown.
- If the element contains further element or attribute content a gray box appears at the right-hand middle portion of the outline (See, "RequiredSingle", OptonalSingle", RequiredMultiple").
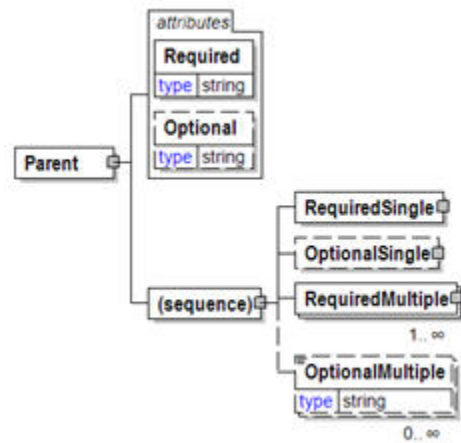
Attributes:
Attributes are contained within a tabbed container that is labelled "attributes".

- A required attribute has a solid outline.
- An optional attribute has a dashed outline.

Content model indicators:
There are three possible types of content: "sequence", "choice", and "all". The sample above shows "sequence".

- (sequence)

   The sequence of the items to the right of the graphic (or below the text) are grouped together.

- (choice)

A choice of the items to the right of the graphic (or below the text) is permitted.

- (all)

All the items to the right of the graphic are required.

> Content models can also display cardinality aspects (single, multiple, optional, required), these are shown in a way similar to elements.

Delivery Message Root Element

DeliveryMessage

The Delivery Message enables the sender to describe the contents and configuration of a shipment at various levels of detail.

DeliveryMessageType [attribute]

DeliveryMessageType is mandatory. A single instance is required.

DeliveryMessageType defines the type of delivery message.

This item is restricted to the following list.

DeliveryMessage

A delivery message type that contains optional routing information, quantities at the DeliveryMessageLineItem level, and details at the DeliveryMessageLineItemDetail level. The seller uses a DeliveryMessage to provide delivery details to the ship-to party and tracking information.

InitialShipmentAdvice

A delivery message type that contains detailed routing information, quantities at the DeliveryMessageLineItem level and optionally details at the DeliveryMessageLineItemDetail level. The seller uses the InitialShipmentAdvice to provide preliminary notification of shipment routing and quantities (can be used as an advanced notice of delivery). The quantities indicated may not necessarily be delivered—for example, if there is damage in transit or the delivery is rerouted to another destination.

LoadedSpecification

A Delivery Message type that contains a specification of loaded goods on a transport unit (e.g. container, rail wagon). A loading specification (LoadedSpecification) can contain goods belonging to many suppliers and buyers and is normally referring to a Loading Instruction.

ShipmentAdvice

A Delivery Message type that contains a specification of goods, that are dispatched and will be delivered to a warehouse. A ShipmentAdvice can refer to a Delivery Instruction Sequence or a CallOff, but is normally also used for notifying a receiving warehouse operator of shipments to the warehouse.

Waybill
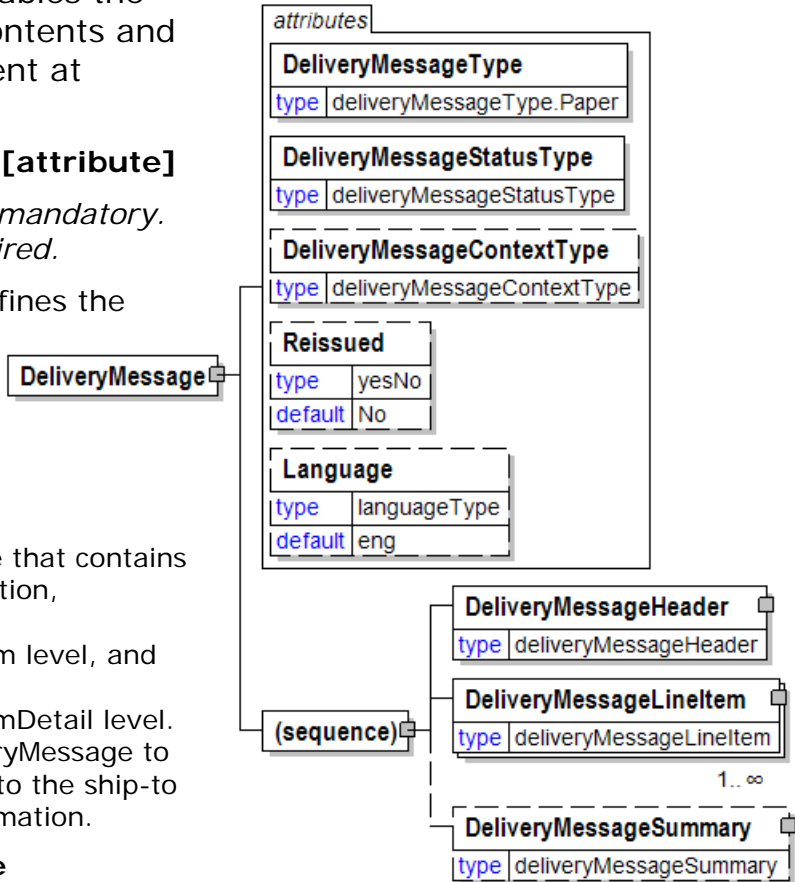
The forwarding agreement or carrying agreement between shipper and air carrier that is used as a receipt for cargo and as a contract of carriage.

DeliveryMessageStatusType [attribute]

DeliveryMessageStatusType is mandatory. A single instance is required.

Identifies the status of the entire delivery message (in other words, at the root level).

This item is restricted to the following list.

Cancelled

The supplied information is cancelled. Items that have been cancelled are not included in totals on the summary levels of the message.

Original

The message information is the first version of that information.

Replaced

The supplied information is replacing earlier supplied information. The receiver should revalidate the information in their system based upon the entire information received.

DeliveryMessageContextType [attribute]

DeliveryMessageContextType is optional. A single instance might exist.

Communicates the reason for this delivery. If not present then this is a standard, typical delivery.

This item is restricted to the following list.

Return

The delivery supports the goods return process.

Reissued [attribute]

Reissued is optional. A single instance might exist.

Either "Yes" or "No".

This item is restricted to the following list.

Yes

No

Language [attribute]

Language is optional. A single instance might exist.

XML has embraced 2 and 3 digit language codes through the application of an addendum to the standard.

Information on the content of this attribute is available at: http://www.loc.gov/standards/iso639-2/ this is the official site of the ISO 639-2 Registration Authority.

- http://www.w3.org/International/O-HTML-tags.html provides an

explanation of the errata updating XML.

- http://www.ietf.org/rfc/rfc3066.txt is the key document that is referenced in the above errata.

(sequence)

The sequence of items below is mandatory. A single instance is required.

DeliveryMessageHeader

DeliveryMessageHeader is mandatory. A single instance is required.

The DeliveryMessageHeader contains information common to the entire delivery.

DeliveryMessageLineItem

DeliveryMessageLineItem is mandatory. One instance is required, multiple instances might exist.

The DeliveryMessageLineItem specifies details for an individual delivery line.

DeliveryMessageSummary

DeliveryMessageSummary is optional. A single instance might exist.

Summary information that applies to the entire Delivery Message.

Primary Elements

DeliveryMessageHeader

The DeliveryMessageHeader contains information common to the entire delivery.

(sequence)

The sequence of items below is mandatory. A single instance is required.

DeliveryMessageNumber

DeliveryMessageNumber is mandatory. A single instance is required.

A unique delivery identifier assigned to each DeliveryMessage as agreed between the trading partners.

TransactionHistoryNumber

TransactionHistoryNumber is optional. A single instance might exist.

A sequential number that keeps track of the version of a document being sent by the document originator except in the case where TransactionHistoryConfirmation is used, in which case the TransactionHistoryNumber refers to the trigger transaction for which the confirmation is being sent.
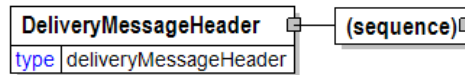
DeliveryMessageDate

DeliveryMessageDate is mandatory. A single instance is required.

The Date and Time when the DeliveryMessage was issued.

DeliveryMessageReference

DeliveryMessageReference is optional. Multiple instances might exist.

An element that identifies the relevant references pertaining to the delivery message, identified by DeliveryMessageReferenceType.

BuyerParty

BuyerParty is optional. A single instance might exist.

The legal entity to which the product is sold. Also commonly referred to as the sold-to party or customer. If no OtherParty is defined as the Payer, the Buyer is the Payer.
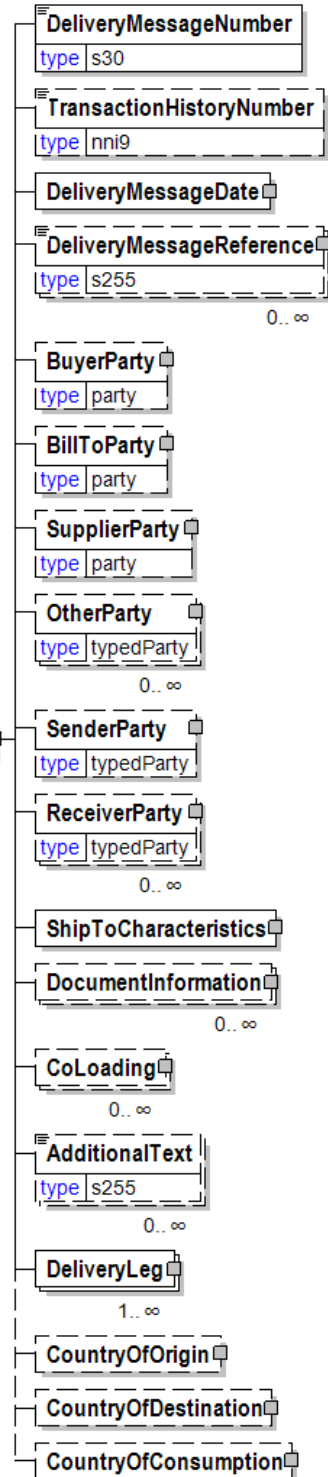
BillToParty

BillToParty is optional. A single instance might exist.

The address where the invoice is to be sent.

SupplierParty

SupplierParty is optional. A single instance might exist.

The organisation or business entity responsible for providing the product. SupplierParty is also the seller of the product, if Seller is not specified as OtherParty = Seller.

OtherParty

OtherParty is optional. Multiple instances might exist.

An organisation or business entity other than those specifically detailed within a business document.

SenderParty

SenderParty is optional. A single instance might exist.

The business entity issuing the business document, the source of the document.

- The entity responsible for the content. If the sender party has out sourced the message service to a third party the SenderParty is the issuer of the e-document and not the party performing the transmission service of the electronic message.

ReceiverParty

ReceiverParty is optional. Multiple instances might exist.

The business entity for whom the business document is intended, the destination of the document.

- The entity interested in the content. If the receiver party has outsourced the message service to a third party the ReceiverParty is the intended party for the e-document and not the party performing the receiving service of the electronic message.

ShipToCharacteristics

ShipToCharacteristics is mandatory. A single instance is required.

A group item that provides information important for the Ship-To Party.

A group item that provides information important for the Ship-To Party.ShipToCharacteristics may be referenced at both the header and line item level. The reference at the header is required and acts as a default for the value at the line level, unless overridden at the line level.

DocumentInformation

DocumentInformation is optional. Multiple instances might exist.

A group element containing a specification of required documents in the business process. Additional free text to be printed on documents can also be specified.

CoLoading

CoLoading is optional. Multiple instances might exist.

A group item specifying information about items to be loaded or loaded on the same transport unit.

Used to identify:

- Delivery together to the drop point

- Transport Orders stuffed together in a container

- Transport Orders not splittable

AdditionalText

AdditionalText is optional. Multiple instances might exist.

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

DeliveryLeg

DeliveryLeg is mandatory. One instance is required, multiple instances might exist.

A DeliveryLeg details the sequence, origin, transportation, and destination of each part of the delivery. More than one leg may be required if there is a change of mode, vehicle, or carrier.

- Although transportation information is optional, it is strongly recommended that any transportation information available be sent.

CountryOfOrigin

CountryOfOrigin is optional. A single instance might exist.

The country of origin for the material.

CountryOfDestination

CountryOfDestination is optional. A single instance might exist.

The country where the goods will be, or were, shipped to.

CountryOfConsumption

CountryOfConsumption is optional. A single instance might exist.

The country of consumption for the material.

DeliveryMessageLineItem

The DeliveryMessageLineItem specifies details for an individual delivery line.

ShipmentComplete [attribute]

ShipmentComplete is optional. A single instance might exist.

Indicates that all shipments for the particular delivery item are complete

This item is restricted to the following list.

Yes

No

The default value.

InstructionByType [attribute]

InstructionByType is optional. A single instance might exist.

Provides the type for how goods are identified on group level when instructed for loading or delivery.

This item is restricted to the following list.

ByMillOrder

Goods are identified on group level by mill order and mill order line item.

ByProduct

Goods are identified on group level by a product specification with all required product details.

ByPurchaseOrder

Goods are identified on group level by purchase order and purchase order line item.
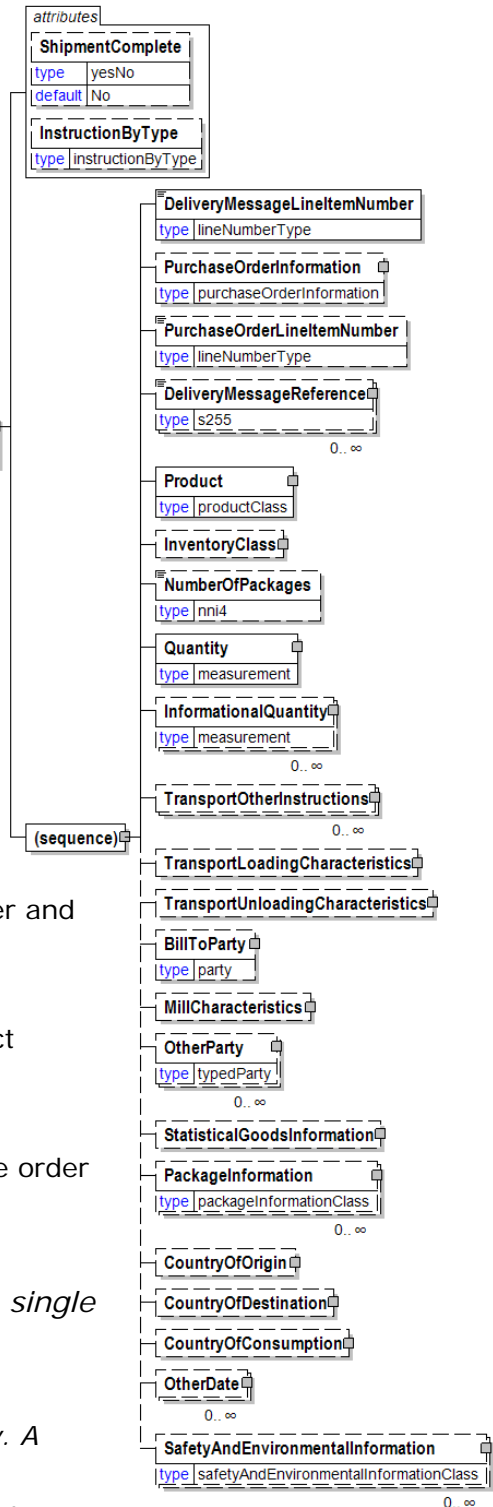
(sequence)

The sequence of items below is mandatory. A single instance is required.

DeliveryMessageLineItemNumber

DeliveryMessageLineItemNumber is mandatory. A single instance is required.

The sequential number that uniquely identifies the delivery line item.

PurchaseOrderInformation

PurchaseOrderInformation is optional. A single instance might exist.

A group item containing information unique to this purchase order, which is provided by the buyer. PurchaseOrderInformation can be optional in the supply chain. Invoices are created without having a Purchase Order in Vendor Managed Inventory. Freight invoices also will not have a Purchase Order number.

PurchaseOrderLineItemNumber

PurchaseOrderLineItemNumber is optional. A single instance might exist.

The sequential number that uniquely identifies the purchase order line item.

DeliveryMessageReference

DeliveryMessageReference is optional. Multiple instances might exist.

An element that identifies the relevant references pertaining to the delivery message, identified by DeliveryMessageReferenceType.

Product

Product is mandatory. A single instance is required.

Product is a group item defining the article and its characteristics. Product is used to specify product characteristics organized by ProductIdentifier, ProductDescription, and Classification. Book Manufacturing, Label Stock, Paper, Pulp, Recovered Paper, Wood Products, and Virgin Fibre market segments have defined their product characteristics and conversion features for implementation in papiNet.

InventoryClass

InventoryClass is optional. A single instance might exist.

A group item containing information about status of inventory and goods items.

NumberOfPackages

NumberOfPackages is optional. A single instance might exist.

The number of packages in the delivery.

Quantity

Quantity is mandatory. A single instance is required.

The Quantity element contains attributes that provide information about the type of quantity that is being communicated, the context in which the particular quantity is to be viewed, and (if the quantity represents an adjustment) an adjustment type.

The Quantity element contains three child elements that enable you to communicate a range of values for the quantity and a target or actual value. It is at this level (Value, RangeMin, and RangeMax) that the unit of measure is specified. This permits the range to be specified in a different unit of measure than the target.

InformationalQuantity

InformationalQuantity is optional. Multiple instances might exist.

A quantity given in a valid UOM used for information purposes only (not for calculation). For example, an ordered quantity was 100 reels as opposed to the invoice quantity of 20,000 pounds.

TransportOtherInstructions

TransportOtherInstructions is optional. Multiple instances might exist.

A group item defining any other instructions for the transport not covered in the description of transport mode, vehicle, unit, and loading characteristics or defining an alternative description for the categories mentioned above.

TransportLoadingCharacteristics

TransportLoadingCharacteristics is optional. A single instance might exist.

A group item defining how the transported items are to be loaded.

TransportUnloadingCharacteristics

TransportUnloadingCharacteristics is optional. A single instance might exist.

A group item defining how the transported items are to be unloaded.

BillToParty

BillToParty is optional. A single instance might exist.

The address where the invoice is to be sent.

MillCharacteristics

MillCharacteristics is optional. A single instance might exist.

A group item defining the mill party and machine identifier where a product is or was produced.

OtherParty

OtherParty is optional. Multiple instances might exist.

An organisation or business entity other than those specifically detailed within a business document.

StatisticalGoodsInformation

StatisticalGoodsInformation is optional. A single instance might exist.

A group item containing statistical information about handled or traded goods.

PackageInformation

PackageInformation is optional. Multiple instances might exist.

The purpose of the PackageInformation structure is to clearly identify physical handling items that constitute the delivery.

PackageInformation is the highest level of product packaging it describes the shipping or warehousing unit.

- If you are communicating a package, usually for logistics or transport purposes, you should include the PackageType, Identifier, ItemCount, and Quantity. (Note: you still have the ability to describe the item with one of the "named" items.)

- If you are communicating one of the named Items there is no need to include PackageType, Identifier, ItemCount, and Quantity.

Since either of these two approaches can be used the entie contents of this element are optional even though the parent may be required. It is expected that you will

fill in the appropriate details.

CountryOfOrigin

CountryOfOrigin is optional. A single instance might exist.

The country of origin for the material.

CountryOfDestination

CountryOfDestination is optional. A single instance might exist.

The country where the goods will be, or were, shipped to.

CountryOfConsumption

CountryOfConsumption is optional. A single instance might exist.

The country of consumption for the material.

OtherDate

OtherDate is optional. Multiple instances might exist.

A date that may not be specifically detailed within a document (example: print date at the PurchaseOrderLineItem).

SafetyAndEnvironmentalInformation

SafetyAndEnvironmentalInformation is optional. Multiple instances might exist.

Name of certification type, if any, on the goods (For example, FSC, PEFC). SafetyAndEnvironmental needs a value or measurement to communicate the percentage of the product is certified (for example, 75% is certified by the indicated agency).

DeliveryMessageSummary

Summary information that applies to the entire Delivery Message.

(sequence)

The sequence of items below is mandatory. A single instance is required.
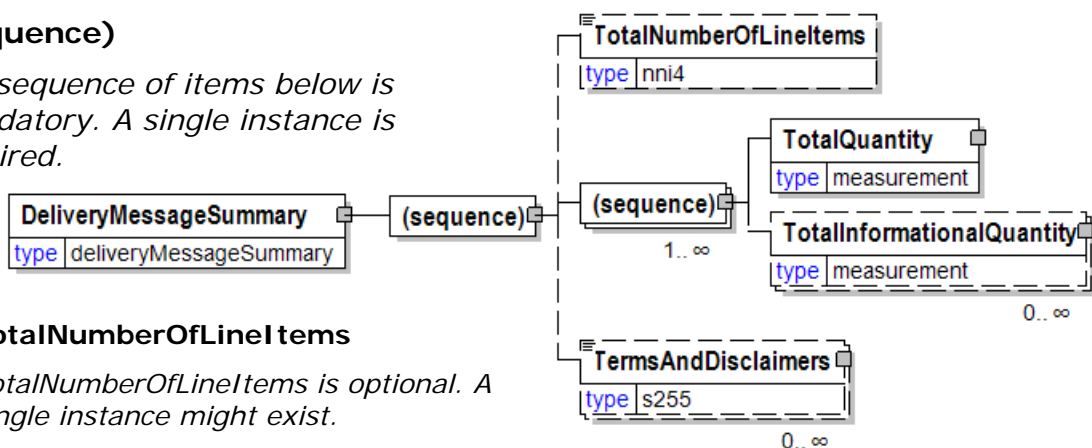
TotalNumberOfLineItems

TotalNumberOfLineItems is optional. A single instance might exist.

The total number of individual line items in the document, regardless of the status or type.

(sequence)

The sequence of items below is mandatory. One instance is required, multiple instances might exist.

TotalQuantity

TotalQuantity is mandatory. A single instance is required.

The total quantity of similar items in the business document. TotalQuantity is primarily used in the summary section of documents where it is repeatable to permit totaling for different units of measure.

TotalInformationalQuantity

TotalInformationalQuantity is optional. Multiple instances might exist.

A quantity that is used to communicate related information about the parent element. This element represents a total that is derived from individual line items.

TermsAndDisclaimers

TermsAndDisclaimers is optional. Multiple instances might exist.

An element that contains legal information with an indication of what the Language is.

Appendix

Using the PackageInformation element

The purpose of the PackageInformation structure is to clearly identify physical handling items that constitute the delivery. A number of different package types are currently supported by the Delivery message (Box, Pallet, PulpUnit, ReelPackage, etc).

Each package, or handling unit, may be composed of further packages or items, for example, PulpUnit(s) [PulpUnit(s) are indicated as PackageInformation@PackageType = PulpUnit] are composed of Bales; Reel packages are composed of Reels; a Pallet may be composed of Boxes and Reels. This relationship is supported by the PackageInformation structure.

Note that uses of further levels in the PackageInformation structure (BaleItem, BoxItem, ReelItem, ReamItem, and SheetItem) are only required if:

- the components of the package themselves carry identifiers and this information is required for updating inventory systems
- detailed characteristics of the item must also be sent in the message (For example, DeliveryMessageReelCharacteristics)

The following examples are provided to illustrate usage.

Twenty single reel packages with no detail characteristics required

```
1    <?xml version = "1.0" encoding = "UTF-8"?>
2    <DeliveryMessage xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance"
     DeliveryMessageStatusType = "Original" DeliveryMessageType = "DeliveryMessage"
     xsi:noNamespaceSchemaLocation = "DeliveryMessageV2R30.xsd">
3        <DeliveryMessageHeader>
35       <DeliveryMessageLineItem>
36           <DeliveryMessageLineItemNumber>2</DeliveryMessageLineItemNumber>
37           <Product>
40           <NumberOfPackages>20</NumberOfPackages>
41           <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
42               <Value UOM = "Kilogram">1177</Value>
43           </Quantity>
44           <PackageInformation PackageType = "ReelPackage">
45               <Identifier IdentifierType = "Barcode" IdentifierCodeType = "Supplier">XYZ12345</Identifier>
46               <ItemCount>
47                   <Value UOM = "Reel">1</Value>
48               </ItemCount>
49               <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
50                   <Value UOM = "Kilogram">1177</Value>
51               </Quantity>
52           </PackageInformation>
53           <PackageInformation PackageType = "ReelPackage">
54               <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Barcode">ABC98765</Identifier>
55               <ItemCount>
56                   <Value UOM = "Reel">1</Value>
57               </ItemCount>
58               <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
59                   <Value UOM = "Kilogram">1172</Value>
60               </Quantity>
61           </PackageInformation>
62       </DeliveryMessageLineItem>
63       <DeliveryMessageSummary>
68    </DeliveryMessage>
```

Twenty single reel packages with DeliveryMessageReelCharacteristics

```
1    <?xml version = "1.0" encoding = "UTF-8"?>
2    <DeliveryMessage xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance" DeliveryMessageStatusType = "Original"
     DeliveryMessageType = "DeliveryMessage" xsi:noNamespaceSchemaLocation = "DeliveryMessageV2R30.xsd">
3        <DeliveryMessageHeader>
35       <DeliveryMessageLineItem>
36           <DeliveryMessageLineItemNumber>1</DeliveryMessageLineItemNumber>
37           <Product>
40           <NumberOfPackages>20</NumberOfPackages>
41           <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
44           <PackageInformation PackageType = "ReelPackage">
45               <Identifier IdentifierType = "Barcode" IdentifierCodeType = "Supplier">XYZ12345</Identifier>
46               <ItemCount>
47                   <Value UOM = "Reel">1</Value>
48               </ItemCount>
49               <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
50                   <Value UOM = "Kilogram">1177</Value>
51               </Quantity>
52               <ReelItem>
53                   <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Barcode">XYZ12345</Identifier>
54                   <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Primary">XYZ12345</Identifier>
55                   <DeliveryMessageReelCharacteristics>
56                       <ReelLength>
57                           <Value UOM = "Meter">15600</Value>
58                       </ReelLength>
59                   </DeliveryMessageReelCharacteristics>
60                   <Quantity QuantityType = "GrossWeight">
61                       <Value UOM = "Kilogram">1177</Value>
62                   </Quantity>
63               </ReelItem>
64           </PackageInformation>
65           <PackageInformation PackageType = "ReelPackage">
66               <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Barcode">ABC98765</Identifier>
67               <ItemCount>
68                   <Value UOM = "Reel">1</Value>
69               </ItemCount>
70               <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
71                   <Value UOM = "Kilogram">1172</Value>
72               </Quantity>
73               <ReelItem>
74                   <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Primary">ABC98765</Identifier>
75                   <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Primary">ABC98765</Identifier>
76                   <DeliveryMessageReelCharacteristics>
77                       <ReelLength>
78                           <Value UOM = "Meter">15588</Value>
79                       </ReelLength>
80                   </DeliveryMessageReelCharacteristics>
81                   <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
82                       <Value UOM = "Kilogram">1172</Value>
83                   </Quantity>
84               </ReelItem>
85           </PackageInformation>
86       </DeliveryMessageLineItem>
87       <DeliveryMessageSummary>
92   </DeliveryMessage>
```

Twenty reel packages containing two reels each, no detail characteristics required.

```xml
1  <?xml version="1.0" encoding="UTF-8"?>
2  <DeliveryMessage xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" DeliveryMessageStatusType="Original"
   DeliveryMessageType="DeliveryMessage" xsi:noNamespaceSchemaLocation="DeliveryMessageV2R30.xsd">
3      <DeliveryMessageHeader>
35     <DeliveryMessageLineItem>
36         <DeliveryMessageLineItemNumber>1</DeliveryMessageLineItemNumber>
37         <Product>
40         <NumberOfPackages>20</NumberOfPackages>
41         <Quantity QuantityType="GrossWeight" QuantityTypeContext="Delivered">
44         <PackageInformation PackageType="ReelPackage">
45             <Identifier IdentifierType="Barcode" IdentifierCodeType="Supplier">XYZ12345</Identifier>
46             <ItemCount>
47                 <Value UOM="Reel">2</Value>
48             </ItemCount>
49             <Quantity QuantityType="GrossWeight" QuantityTypeContext="Delivered">
50                 <Value UOM="Kilogram">1177</Value>
51             </Quantity>
52             <ReelItem>
53                 <Identifier IdentifierCodeType="Supplier" IdentifierType="Primary">XYZ12345</Identifier>
54                 <Quantity QuantityType="GrossWeight">
55                     <Value UOM="Kilogram">1177</Value>
56                 </Quantity>
57             </ReelItem>
58             <ReelItem>
59                 <Identifier IdentifierCodeType="Supplier" IdentifierType="Primary">XYZ12345</Identifier>
60                 <Quantity QuantityType="GrossWeight">
61                     <Value UOM="Kilogram">588</Value>
62                 </Quantity>
63             </ReelItem>
64             <ReelItem>
65                 <Identifier IdentifierCodeType="Supplier" IdentifierType="Primary">XYZ12348</Identifier>
66                 <Quantity QuantityType="GrossWeight">
67                     <Value UOM="Kilogram">589</Value>
68                 </Quantity>
69             </ReelItem>
70         </PackageInformation>
71         <PackageInformation PackageType="ReelPackage">
72             <Identifier IdentifierCodeType="Supplier" IdentifierType="Barcode">ABC98765</Identifier>
73             <ItemCount>
74                 <Value UOM="Reel">2</Value>
75             </ItemCount>
76             <Quantity QuantityType="GrossWeight">
77                 <Value UOM="Kilogram">1172</Value>
78             </Quantity>
79             <ReelItem>
80                 <Identifier IdentifierCodeType="Supplier" IdentifierType="Primary">ABC98765</Identifier>
81                 <Quantity QuantityType="GrossWeight" QuantityTypeContext="Delivered">
82                     <Value UOM="Kilogram">586</Value>
83                 </Quantity>
84             </ReelItem>
85             <ReelItem>
86                 <Identifier IdentifierCodeType="Supplier" IdentifierType="Primary">ABD45362</Identifier>
87                 <Quantity QuantityType="GrossWeight">
88                     <Value UOM="Kilogram">586</Value>
89                 </Quantity>
90             </ReelItem>
91         </PackageInformation>
92     </DeliveryMessageLineItem>
93     <DeliveryMessageSummary>
98  </DeliveryMessage>
99
```

Ten PulpUnit(s) consisting of 6 bales, but with no bale information required.

```xml
1   <?xml version = "1.0" encoding = "UTF-8"?>
2   <DeliveryMessage xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance" DeliveryMessageStatusType = "Original"
    DeliveryMessageType = "DeliveryMessage" xsi:noNamespaceSchemaLocation = "DeliveryMessageV2R30.xsd">
3       <DeliveryMessageHeader>
35      <DeliveryMessageLineItem>
36          <DeliveryMessageLineItemNumber>1</DeliveryMessageLineItemNumber>
37          <Product>
38              <ProductIdentifier ProductIdentifierType = "BrandName" Agency = "Seller">ourProduct</ProductIdentifier>
39          </Product>
40          <NumberOfPackages>10</NumberOfPackages>
41          <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
42              <Value UOM = "Kilogram">1177</Value>
43          </Quantity>
44          <PackageInformation PackageType = "PulpUnit">
45              <Identifier IdentifierType = "Barcode" IdentifierCodeType = "Supplier">XYZ12345</Identifier>
46              <ItemCount>
47                  <Value UOM = "Bale">6</Value>
48              </ItemCount>
49              <Quantity QuantityType = "AirDryWeight" QuantityTypeContext = "Delivered">
50                  <Value UOM = "Kilogram">3050</Value>
51              </Quantity>
52          </PackageInformation>
53          <PackageInformation PackageType = "PulpUnit">
54              <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Barcode">ABC98765</Identifier>
55              <ItemCount>
56                  <Value UOM = "Bale">6</Value>
57              </ItemCount>
58              <Quantity QuantityType = "GrossWeight">
59                  <Value UOM = "Kilogram">3047</Value>
60              </Quantity>
61          </PackageInformation>
62      </DeliveryMessageLineItem>
63      <DeliveryMessageSummary>
68  </DeliveryMessage>
```

This example is for a single pallet consisting of 10 boxes. Pallet is stretch wrapped and has its own identifier.

```
1    <?xml version = "1.0" encoding = "UTF-8"?>
2    <DeliveryMessage xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance" DeliveryMessageStatusType = "Original"
     DeliveryMessageType = "DeliveryMessage" xsi:noNamespaceSchemaLocation = "DeliveryMessageV2R30.xsd">
3       <DeliveryMessageHeader>
35      <DeliveryMessageLineItem>
36         <DeliveryMessageLineItemNumber>1</DeliveryMessageLineItemNumber>
37         <Product>
40         <NumberOfPackages>1</NumberOfPackages>
41         <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
42            <Value UOM = "Kilogram">1177</Value>
43         </Quantity>
44         <PackageInformation PackageType = "Pallet">
45            <Identifier IdentifierType = "Barcode" IdentifierCodeType = "Supplier">P12345</Identifier>
46            <ItemCount>
47               <Value UOM = "Box">10</Value>
48            </ItemCount>
49            <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
50               <Value UOM = "Kilogram">230</Value>
51            </Quantity>
52            <BoxItem>
53               <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Primary">ABC98765</Identifier>
54               <ItemCount>
55                  <Value UOM = "Ream">10</Value>
56               </ItemCount>
57               <Quantity QuantityType = "GrossWeight" QuantityTypeContext = "Delivered">
58                  <Value UOM = "Kilogram">23</Value>
59               </Quantity>
60            </BoxItem>
61            <BoxItem>
62               <Identifier IdentifierCodeType = "Supplier" IdentifierType = "Primary">ABC98766</Identifier>
63               <ItemCount>
64                  <Value UOM = "Ream">10</Value>
65               </ItemCount>
66               <Quantity QuantityType = "GrossWeight">
67                  <Value UOM = "Kilogram">23</Value>
68               </Quantity>
69            </BoxItem>
70         </PackageInformation>
71      </DeliveryMessageLineItem>
72      <DeliveryMessageSummary>
77   </DeliveryMessage>
```

DeliveryMessage Scenario Listing

Scenario A	A DeliveryMessage is sent that specifies reels packed on pallets.
Scenario B	A DeliveryMessage is sent that specifies many reels packed in reel packages.
Scenario C	[obsolete]
Scenario D	A DeliveryMessage is sent that details sheets packed in reams which are packed in boxes.
Scenario E	A DeliveryMessage is sent that specifies multiple delivery legs.
Scenario F	A DeliveryMessage is sent that specifies a mixed product pallet that combines reels and reams of sheets on the same pallet.
Scenario G	A DeliveryMessage of type "InitialShipmentAdvice" is sent to the Buyer that does not include delivery items.
Scenario H	A DeliveryMessage is sent that corrects an erroneous DeliveryMessage.
Scenario I	A DeliveryMessage is sent that cancels an erroneous DeliveryMessage..

Scenario A

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent that specifies reels packed on pallets.
Outcome	Delivery is recorded as shipped in the Buyer's system
Initiator	Supplier
Receiver	Buyer
Trigger	Goods are ready for Delivery
Step 1.	Supplier sends a Delivery Message that corresponds to one PurchaseOrderInformation,

PurchaseOrderLineItemNumber combination. Each PackageInformation specifies the Pallets that are sent and the Reels that are contained in each Pallet.

- Pallet is the highest packing level in the Use Case so the PackageInformation@PackageType is "Pallet". PackageInformation can occur multiple times.

- The MixedProductPalletIndicator on Pallet is set to "No" because only Reels from one order are on this Pallet

- Identifier is used to distinguish the Pallet

- ItemCount is the count of the number of Reels on this Pallet

- Quantity contains the GrossWeight which is the full weight of the Pallet, Wrapping and Reels

- InformationalQuantity specifies an AdjustmentType which details the weight of any Wrapping or Core

- InformationalQuantity with QuantityType="NetNetWeight" specifies the usable Reel paper on the pallet

PackageInformation contains one or more ReelItem(s). A ReelItem details each Reel:

- Identifier is the Identifier used to distinguish the Reel

- Quantity contains the GrossWeight which is the full weight of the Reel including Wrapping and Core

- InformationalQuantity specifies an AdjustmentType which details the weight of any Wrapping or Core

- InformationalQuantity with QuantityType="NetNetWeight" specify the usable paper on the Reel

Statuses sent with message:

	• DeliveryMessageStatusType = "Original"

Scenario B

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent that specifies many reels packed in reel packages.
Outcome	Delivery is recorded as shipped in the Buyer's system
Initiator	Supplier
Receiver	Buyer
Trigger	Goods are ready for Delivery
Step 1.	Supplier sends a Delivery Message that corresponds to one PurchaseOrderInformation, PurchaseOrderLineItemNumber combination. Each PackageInformation occurrence specifies the reel packages that are sent and the Reels that are contained in each ReelPackages. • Reel is the highest packing level in The Use Case so the initial PackageInformation/@PackageType is "ReelPackage". PackageInformation can occur multiple times. • Identifier is used to distinguish the reel packages. • ItemCount is the count of the number of Reels packed in the ReelPackage. • Quantity contains the GrossWeight which is the full weight of the ReelPackage including packaging, wrapping and reels • InformationalQuantity specifies an AdjustmentType which details the weight of any Wrapping or Core • InformationalQuantity with QuantityType="NetNetWeight" specify the

usable paper in the multi-reel package

PackageInformation contains two or more ReelItem(s). A ReelItem details each Reel:

- Identifier is the Identifier used to distinguish the Reel Quantity contains the GrossWeight which is the full weight of the Reel including Wrapping and Core

- InformationalQuantity specifies an AdjustmentType which details the weight of any Wrapping or Core.

- InformationalQuantity with QuantityType="NetNetWeight" specify the usable paper in the ReelPackage.

Statuses sent within the message:

- DeliveryMessageStatusType = "Original"

Scenario D

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent that details sheets packed in reams which are packed in boxes.
Outcome	Delivery is recorded as shipped in the Buyer's system
Initiator	Supplier
Receiver	Buyer
Preconditions	Goods are ready for Delivery
Step 1.	Supplier sends a Delivery Message that corresponds to one PurchaseOrderInformation, PurchaseOrderLineItemNumber combination. Each PackageInformation occurrence specifies the Boxes that contain the Reams that are sent and optionally may contain SheetItem information. • Box is the highest packing level in the Use

	Case so the PackageInformation@PackageType is Box. PackageInformation can occur multiple times.
	• Identifier is the Identifier used to distinguish the Box
	• ItemCount is the count of the number of Reams packed in the Box
	• Quantity contains the GrossWeight which is the full weight of the Box including packaging
	• InformationalQuantity specifies an AdjustmentType which details the weight of any packaging
	• InformationalQuantity with QuantityType="NetNetWeight" specifies the weight of the Reams in the box, i.e. the Box GrossWeight, less wrapping and packaging.
Continued	Ream is the next highest packing level in the Use Case. Ream is an optional element selected within PackageInformation. Ream can occur multiple times.
	• Identifier is the Identifier used to distinguish the Ream
	• ItemCount is the count of the number of sheets in the Ream
	• Quantity contains the GrossWeight which is the full weight of the ream including Wrapping
	• InformationalQuantity specifies an AdjustmentType which details the weight of any Wrapping
	• InformationalQuantity with QuantityType="NetNetWeight" specify the usable sheet paper in the Ream

Continued	A SheetItem is optional. It details DateSheeted and DateFinished.
	• A SheetItem does NOT have an Identifier.
Continued	Statuses sent within the message:
	• DeliveryMessageStatusType = "Original"

Scenario E

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent that specifies multiple DeliveryLeg(s).
Outcome	Delivery is recorded as shipped in the Buyer's system
Initiator	Supplier
Receiver	Buyer
Preconditions	Goods are ready for Delivery
Step 1.	Supplier sends a Delivery Message that has multiple DeliveryLeg(s) for the entire message. A DeliveryLeg details the actual transportation origin and destination. It includes: • DeliveryLegSequenceNumber which increments starting at 1 • DeliveryOrigin includes LocationParty which specifies "CustomerFacility", "Mill", "Port", "Terminal", "Warehouse, etc. • DeliveryOrigin Date and Name are projected For each DeliveryLeg, optional Transportation can be specified. • TransportModeCharacteristics includes the attribute TransportModeType (e.g. "Rail") • TransportVehicleCharacteristics includes the attribute TransportVehicleType (e.g. "Truck")

- TransportUnitCharacteristics includes the attribute TransportUnitType (e.g. "Trailer")

- TransportUnitCharacteristics includes the TransportUnitIdentifier (e.g. ID of the Trailer)

- TransportLoadingCharacteristics and TransportOtherInstructions further describe the Transportation

- DeliveryTransitTime optionally projects the Days, Hours, and Minutes between Origin and Destination

- DeliveryDestination includes LocationParty which specifies "CustomerFacility", "Mill", "Port", "Terminal", "Warehouse, etc.

- DeliveryDestination Date and Name are projected

Statuses sent within the message:

- DeliveryMessageStatusType = "Original"

Scenario F

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent that specifies a mixed product pallet that combines reels and reams of sheets on the same pallet.
Outcome	Delivery is recorded as shipped in the Buyer's system
Initiator	Supplier
Receiver	Buyer
Preconditions	Goods are ready for Delivery
Step 1.	Supplier sends a Delivery Message that corresponds to two different PurchaseOrderInformation, PurchaseOrderLineItemNumber combinations

	with a request to send both order line items via the same Pallet, Pallet A. Both PackageInformation specify the same pallet and mark it with MixedProductPalletIndicator of "Yes".
Step 2.	Pallet A includes reams of sheets
	Pallet is the highest packing level in Part 1 of this Use Case so PackageInformation@PackageType is "Pallet". Pallet can occur multiple times.
	- The MixedProductPalletIndicator on PackageInformation is set to "Yes" because Reels and Reams of Sheets are mixed on the Pallet - Identifier is the Identifier used to distinguish the Pallet - ItemCount is the count of the number of Reams on this Pallet - Quantity contains the GrossWeight which is the full weight of the reams on the Pallet including Wrapping - InformationalQuantity specifies an AdjustmentType which details the weight of any pallet Wrapping or packaging - InformationalQuantity with QuantityType="NetNetWeight" specifies the weight of the Reams on the Pallet, i.e. the GrossWeight of the Reams, less any Pallet wrapping and packaging.
Step 2, Continued	PackageInformation contains one or more Reams
	- A Ream details each Ream. Ream can occur multiple times. - Identifier is the Identifier used to distinguish the Ream - ItemCount is the count of the number of Sheets packed in the Ream

	• Quantity contains the GrossWeight which is the full weight of the ream including Wrapping • InformationalQuantity specifies an AdjustmentType which details the weight of any Wrapping • InformationalQuantity with QuantityType="NetNetWeight" specify the usable sheet paper in the Ream
Step 3.	Pallet A also includes reels Pallet is the highest packing level in Part II of this Use Case so PackageInformation@PackageType is "Pallet". PackageInformation can occur multiple times. • The MixedProductPalletIndicator on PackageInformation is set to "Yes" because Reels and Reams of Sheets are mixed on the Pallet • Identifier is the Identifier used to distinguish the Pallet • ItemCount is the number of Reels on this Pallet • Quantity contains the GrossWeight which is the full weight of the ReelItem(s) on the Pallet including pallet Wrapping and packaging. • InformationalQuantity specifies an AdjustmentType which details the weight of any pallet Wrapping or packaging • InformationalQuantity with QuantityType="NetNetWeight" specifies the weight of the ReelItem(s) on the Pallet, i.e. the GrossWeight of the ReelItem(s), less any Pallet wrapping and packaging. • PackageInformation contains one or more ReelItem(s)

Step 3, Continued	A ReelItem details each Reel:
	• Identifier is the Identifier used to distinguish the Reel
	• Quantity contains the GrossWeight which is the full weight of the Reel including Wrapping and Core
	• InformationalQuantity specifies an AdjustmentType which details the weight of any Wrapping or Core
	• InformationalQuantity with QuantityType="NetNetWeight" specify the usable paper on the Reel
	Statuses sent within the message:
	• DeliveryMessageStatusType = "Original"

Scenario G

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	An "InitialShipmentAdvice" type of a DeliveryMessage is sent to the Buyer that does not include delivery items.
Outcome	Order availability is recorded in the Buyer's system; not full delivery information
Initiator	Supplier
Receiver	Buyer
Preconditions	Goods are ready for Delivery
XML File	The name of any sample file.
Trigger	What starts the process?
Step 1.	Supplier sends a Delivery Message that corresponds to one PurchaseOrderInformation, PurchaseOrderLineItemNumber combination.
	• DeliveryMessageType is set to "InitialShipmentAdvice".

	• There is no description or Identifiers available on the packaging of the delivery, only that the Order is ready for later Call Off. Statuses sent within the message: • DeliveryMessageStatusType = "Original"

Scenario H

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent that corrects an erroneous DeliveryMessage.
Outcome	The Original Delivery Information is removed from the Buyer's System and is replaced by the Replacement Delivery Information.
Initiator	Supplier
Receiver	Buyer
Preconditions	Goods were ready for Delivery and an Original DeliveryMessage was sent. The Delivery is in error and should be replaced.
Step 1.	Supplier sends an "Original" Delivery Message that corresponds to one or more PurchaseOrderInformation, PurchaseOrderLineItemNumber combination and includes PackageInformation details.
Step 2.	An error in the original DeliveryMessage is noted.
Step 3.	Supplier replaces the entire DeliveryMessage. • DeliveryMessageStatusType is set to "Replaced". The new message contains full replacement information. • In the DeliveryMessageReference, the ReferenceType attribute is set to "OriginalDeliveryNumber". The element contains that number.

Scenario I

Message	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent that cancels an erroneous DeliveryMessage.
Outcome	The Cancelled Delivery Information is removed from the Buyer's systems.
Initiator	Supplier
Receiver	Buyer
Preconditions	Goods were ready for Delivery and an Original DeliveryMessage was sent. The Delivery is in error and should be cancelled.
Step 1.	Supplier sends an "Original" Delivery Message that corresponds to one or more PurchaseOrderInformation, PurchaseOrderLineItemNumber combination and includes PackageInformation details.
Step 2.	An error in the original DeliveryMessage is noted.
Step 3.	Supplier cancels with a Replacement Delivery Message. • DeliveryMessageStatusType is set to "Cancelled". The new message contains no replacement information. • In the DeliveryMessageReference, the ReferenceType attribute is set to "OriginalDeliveryNumber". The element contains that number.