DeliveryMessageBook

papiNet Standard - Version 2.31

Documentation

DeliveryMessageBook

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Use of Documents in papiNet Implementations

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DeliveryMessageBook Documentation

Introduction

This document is designed for use within the Book Manufacturing Industry, consisting of publishers, printers, and component suppliers. It is based upon the standard papiNet DeliveryMessage, but customized to fit the Book Manufacturing Industry. It will be useful to become acquainted with certain papiNet documents such as the Data Dictionary and the Business Process. These can be found at the papiNet site, http://www.papinet.org.

DeliveryMessageBook e-Document Overview

The DeliveryMessageBook e-Document enables the sender to describe the contents and configuration of a shipment at various levels of detail.

The DeliveryMessageBook e-Document specifies the details of a delivery that is either being despatched or will be despatched at a later time. The attribute DeliveryMessageType 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 DeliveryMessageBook can be used as a response to call off, delivery instruction and loading instruction when a delivery from a warehouse is requested. A DeliveryMessageBook e-Document fulfils the same or similar role as a delivery note, manifest, weigh list, tally sheet, advanced shipping notice, loading order, or packing specification.

The Scope of the DeliveryMessageBook e-Document

The DeliveryMessageBook 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.

DeliveryMessageType [attribute]

DeliveryMessageType defines the type of DeliveryMessageBook.

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 DeliveryMessage 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 DeliveryMessage 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.

ThirdPartyShipmentAdvice

Notification of a shipment from a warehouse to a party other than the party that ordered the product from the supplier.

Waybill

The forwarding agreement or carrying agreement that is used as a receipt for cargo and as a contract of carriage.

Processing the DeliveryMessageBook

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

Status Values Used When Processing the DeliveryMessageBook

The following DeliveryMessageStatusType attributes are used at the DeliveryMessage level:
- Original - The supplied information is the first version of that information.
- Cancelled - The supplied information has been cancelled. Items that

have been cancelled are not included in totals on the summary levels of the e-document.

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

Understanding the Diagrams and Content

This section provides a graphical view of the schema structures, a discussion of the item's children. You can find additional information about papiNet and the standard at www.papiNet.org.

The graphics contain 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.

The following information should help you interpret and understand this standard. Please note the following:

- Content Model and Cardinality operate together to determine if the element or attribute are required in the instance document.
- The same attribute can never appear multiple times in the same element so, you will never see a multiple cardinality indicator.

Content model indicators:

There are three possible types of content: "sequence", "choice", and "all". The papiNet standard currently does not use the "all" construct.

- (sequence)

    The sequence of the items to the right of the graphic (or below the text) is required.
- (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.

Cardinality indicators:

- Dotted line around element or attribute.

    A single instance of the item can optionally exist.
- Dotted line around item with range indicated below.

    Multiple instances of the item can optionally exist.
- Solid line around item.

    A single instance of the item must exist.
- Solid line around item with range indicated below

    At least one instance must exist; multiple instances can optionally exist.

Datatype indication:

When a data type is assigned to an element (either a simple type or complex type the name of the data type is presented beneath the item name in the graphic.

- In some cases additional information about the data type is presented (the default value).

Elements can either have content that is textual/numeric in nature or content that is made up of additional elements and/or attributes.

- When the content is textual/numeric in nature "three straight horizontal lines" will appear in the upper left-hand corner of the graphic. Pay attention to these elements because they are where you will be entering your information.
- When the content is made up of additional elements and/or attributes a "gray-box" will appear on the right-hand side of the graphic.
- If the graphic shows both the horizontal lines and the gray-box then, in the papiNet standard, the content below the element are attributes.

DeliveryMessageBook Root Element

DeliveryMessageBook

The DeliveryMessageBook element is the root element for the DeliveryMessageBook e-Document.

The DeliveryMessageBook e-Document 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 DeliveryMessageBook.

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.

ShipmentAdvice

A DeliveryMessage 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

ThirdPartyShipmentAdvice

Notification of a shipment from a warehouse to a party other than the party that ordered the product from the supplier.

Waybill

The forwarding agreement or carrying agreement 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 DeliveryMessage (in other words, at the root level).

This item is restricted to the following list.

Cancelled

The supplied information has been cancelled. Items that have been cancelled are not included in totals on the summary levels of the e-document.

Original

The supplied 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.

DeliveryMessageBookHeader

DeliveryMessageBookHeader is mandatory. A single instance is required.

The DeliveryMessageBookHeader is required and contains information common to the entire delivery.

DeliveryMessageBookShipment

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

DeliveryMessageBookShipment is required. The DeliveryMessageBookShipment specifies an individual shipment. It may contain many shipment line items.

DeliveryMessageBookSummary

DeliveryMessageBookSummary is mandatory. A single instance is required.

DeliveryMessageBookSummary is a required element.

Primary Elements

DeliveryMessageBookHeader

The DeliveryMessageBookHeader is required and 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. However when the document is a confirmation document, in which case the
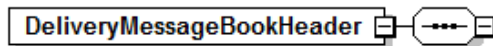
TransactionHistoryNumber refers to the trigger transaction for which the confirmation is being sent.

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 DeliveryMessage, identified by DeliveryMessageReferenceType.

BuyerParty

BuyerParty is mandatory. A single instance is required.

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.
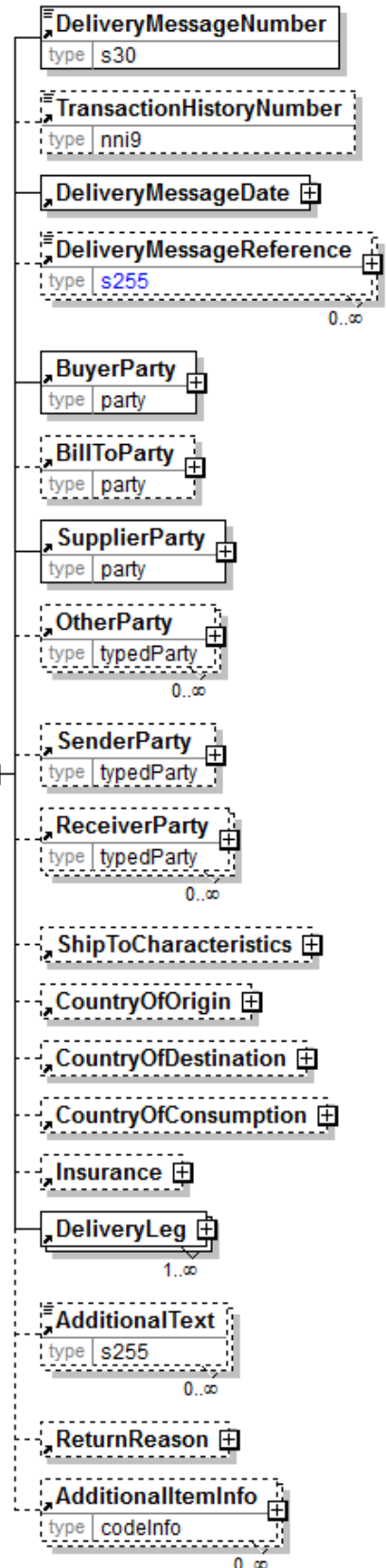
BillToParty

BillToParty is optional. A single instance might exist.

The address where the Invoice is to be sent.

SupplierParty

SupplierParty is mandatory. A single instance is required.

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 e-Document.

SenderParty

SenderParty is optional. A single instance might exist.

The business entity issuing the e-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 e-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 optional. A single instance might exist.

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.

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.

Insurance

Insurance is optional. A single instance might exist.

Group element containing information about insurance

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.

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.

ReturnReason

ReturnReason is optional. A single instance might exist.

A group item containing the reason for the Return

AdditionalItemInfo

AdditionalItemInfo is optional. Multiple instances might exist.

A grouping element that contains information about additional items specified by an agency. Restricted use of this element is recommended.

DeliveryMessageBookShipment

DeliveryMessageBookShipment is required. The DeliveryMessageBookShipment specifies an individual shipment. It may contain many shipment line items.

(sequence)

The contents of (sequence) are mandatory. A single instance is required.
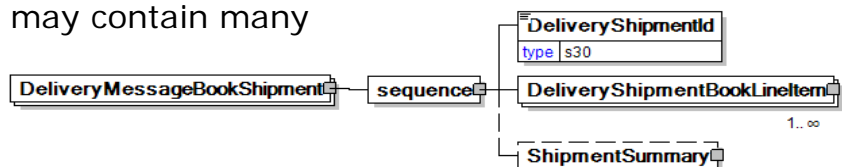
DeliveryShipmentId

DeliveryShipmentId is mandatory. A single instance is required.

Unique identifier for the shipment

DeliveryShipmentBookLineItem

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

DeliveryShipmentBookLineItem is required. The DeliveryShipmentBookLineItem specifies an individual shipment delivery line for one purchase order and purchase order line item.

ShipmentSummary

ShipmentSummary is optional. A single instance might exist.

Summery information for an entire shipment

DeliveryShipmentBookLineItem

DeliveryShipmentBookLineItem is required. The DeliveryShipmentBookLineItem specifies an individual shipment delivery line for one purchase order and purchase order line item.

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

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

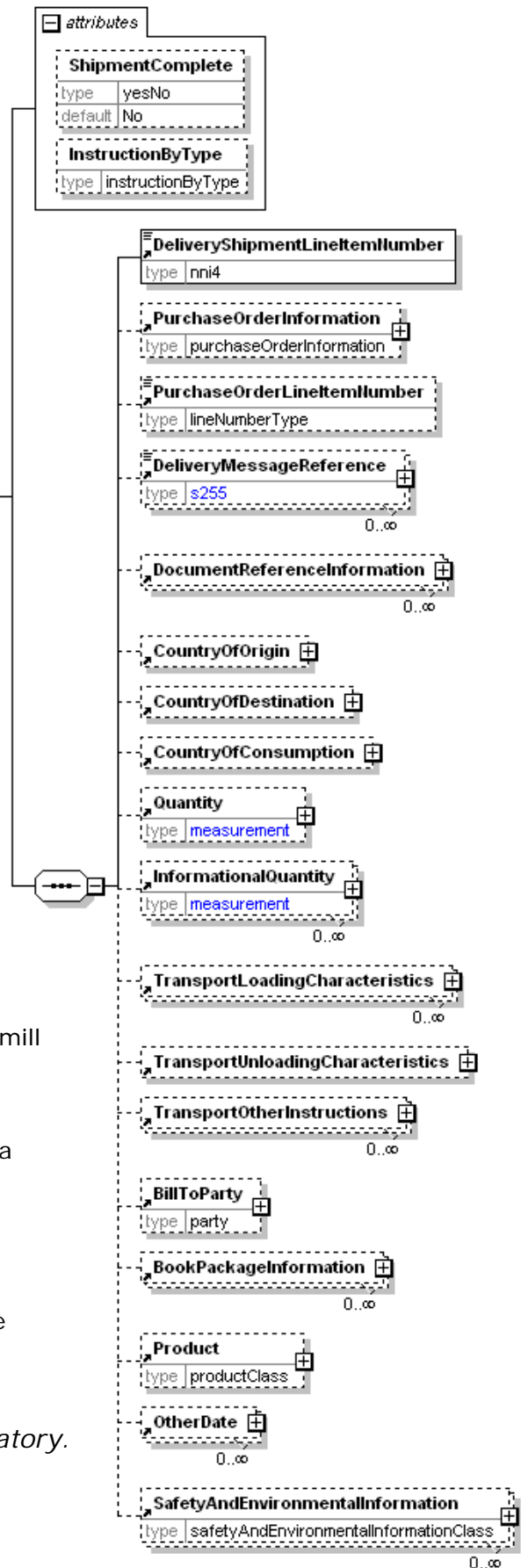Goods are identified on group level by purchase order and purchase order line item.

(sequence)

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

DeliveryShipmentLineItemNumber

DeliveryShipmentLineItemNumber is

mandatory. A single instance is required.

Sequential number to identify individual line items within a shipment

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.

DocumentReferenceInformation

DocumentReferenceInformation is optional. Multiple instances might exist.

A group item containing reference information applicable to a document.

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.

Quantity

Quantity is optional. A single instance might exist.

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.

TransportLoadingCharacteristics

TransportLoadingCharacteristics is optional. Multiple instances 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.

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.

BillToParty

BillToParty is optional. A single instance might exist.

The address where the invoice is to be sent.

BookPackageInformation

BookPackageInformation is optional. Multiple instances might exist.

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

BookPackageInformation is the highest level of product packaging and describes the shipping or warehousing unit.

Product

Product is optional. A single instance might exist.

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.

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).
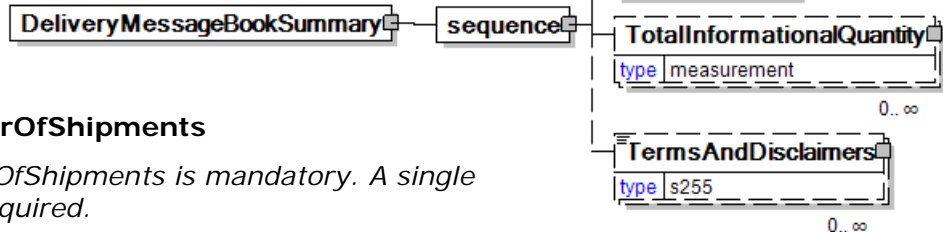
DeliveryMessageBookSummary

DeliveryMessageBookSummary is a required element.

(sequence)

The contents of (sequence) are mandatory. A single instance is required.

TotalNumberOfShipments

TotalNumberOfShipments is mandatory. A single instance is required.

Total number of shipments referred to in a delivery message.

TotalQuantity

TotalQuantity is optional. A single instance might exist.

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.

DeliveryMessageBook Business Scenarios

DeliveryMessageBook Scenario Listing

Scenario A	Printing and Binding Supplier ships finished product to Buyer's warehouse and a drop shipment location. A DeliveryMessage is sent to the Buyer that specifies books packed in boxes on pallets and shipped.
Scenario B	Component vendor sends a DeliveryMessage e-Document for covers to Printing and Binding Supplier with a copy to the buyer that specifies covers packed on pallets
Scenario C	A Purchase Order e-Document was sent to a supplier with incomplete ShipTo Information (the supplier is instructed to request ShipTo Information when the product is ready to be shipped). The supplier sends an Initial Shipment Advice version of the DeliveryMessage to the buyer requesting Shipping Instructions. This e-Document contains goods packing counts and related information. The buyer responds by sending one or more CallOff e-Document to the supplier. When the finished goods are actually sent, the supplier sends a DeliveryMessage to the buyer confirming shipment(s).
Scenario D	A DeliveryMessage is sent that corrects an erroneous DeliveryMessage.

Scenario A

e-Document	DeliveryMessage
Type	DeliveryMessage
Scenario	A DeliveryMessage is sent to the Buyer that specifies books packed in boxes on pallets.
Outcome	Delivery is recorded as shipped in the Buyer's system
Initiator	• Printing • Binding Supplier
Receiver	• Buyer • Warehouse
Trigger	Goods are ready for Delivery

Step 1.	Supplier sends a DeliveryMessage for the books that are being shipped. Each PackageInformation specifies the Pallets that are sent and the Boxes and Units that are contained on 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 one product (ISBN) is on each Pallet - Identifier is the Identifier used to distinguish the Pallet - ItemCount is the count of the number of Boxes on this Pallet - Quantity contains the Units which is the total number of books on the Pallets. - InformationalQuantity is the full weight of the Pallet, Boxes, and Books.
	Statuses sent within the e-Document: DeliveryMessageStatusType = "Original"

Scenario B

e-Document	DeliveryMessage
Type	DeliveryMessage
Scenario	Component Vendor sends a DeliveryMessage e-Document for covers to Printing and Binding Supplier with a copy to the Buyer that specifies covers packed on pallets
Outcome	Delivery is recorded as shipped in the Buyer's system
Initiator	Component Vendor
Receiver	- Printing and Binding Supplier - Buyer/Publisher
Trigger	Goods are ready for Delivery
Step 1.	Supplier sends a DeliveryMessage that corresponds to one PurchaseOrderInformation, PurchaseOrderLineItemNumber combination. Each PackageInformation occurrence specifies the Pallets that are sent and the Covers that are contained in

each Pallet.
- Pallet is the highest packing level in the Use Case so the initial PackageInformation@PackageType is "Pallet".
- PackageInformation can occur multiple times.
- Identifier is the Identifier used to distinguish the Pallet. ItemCount is the count of the number of Units packed in the Pallet.
- Quantity contains the GrossWeight which is the full weight of the Pallet including packaging and Wrapping
- Identifier is the Identifier used to distinguish the Reel

Statuses sent within the e-Document:
- DeliveryMessageStatusType = "Original"

Scenario C

e-Document	DeliveryMessage
Type	InitialShipmentAdvice
Scenario	An Initial Shipment Advice version of the DeliveryMessage is sent to the buyer requesting Shipping Instructions.
Outcome	Books are recorded as ready to ship in the Buyer's system. Buyer's system sends ShippingInstructions e-Document to supplier
Initiator	Supplier
Receiver	Buyer
Preconditions	Goods are ready for Delivery
Step 1.	Supplier sends a DeliveryMessage that corresponds to one or more products (Books) that are ready to ship. The e-Document specifies the PackageType information (pallets, boxes) and the quantities and weights.
Step 2.	The buyer sends ShippingInstructions to the supplier specifying transport information, ShipTo locations, and dates.
Step 3.	Supplier sends a DeliveryMessage to the buyer that confirms the shipment has been made.

	• Statuses sent within the e-Document: DeliveryMessageStatusType = "Original"

Scenario D

e-Document	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" DeliveryMessage that corresponds to one or more PurchaseOrderInformation, PurchaseOrderLineItemNumber combination and includes PackageInformation details.
Step 2.	An error in the original DeliveryMessage is noted.