papiNet

DeliveryInstruction

papiNet Standard - Version 2.31

Documentation

Global Standard for the Paper and Forest Products Supply Chain

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Production Release

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DeliveryInstruction Documentation

DeliveryInstruction e-Document Overview

A DeliveryInstruction can be used to instruct movement of goods to warehouses and movement of goods to virtual locations within warehouses as well as deliveries to customers. The DeliveryInstruction is designed to fulfil supply chain requirements regarding instruction of goods deliveries related to Mills, Suppliers, Forwarders, Warehouse Operators, Customers, and End-Users. The DeliveryInstruction is load oriented which is very efficient when mills and suppliers move goods in large quantities between warehouses.

Goods can be invoiced before they are delivered to a customer; in this case the invoiced goods owned by the customer are kept separate in the warehouse (either virtually or physically). A DeliveryInstruction specifies if goods should be delivered from supplier owned stock or customer owned stock.

The e-Document type DeliveryInstruction can contain many delivery instruction sequences. Each sequence specifies one delivery event. A DeliveryInstructionSequence can contain quantity for one or many loads.

A LoadingInstruction specifies loading of transport units. A Forwarder receiving a DeliveryInstruction from a supplier can convert it into many LoadingInstructions, which are sent to a Warehouse Operator. A sequence in a LoadingInstruction specifies the details of how to load one transport unit. A LoadingInstruction can include goods from many delivery instructions and also goods belonging to many suppliers.

Goods to be delivered can be specified By Mill Order, By Product or By Purchase Order. Mills and Suppliers normally use By Mill Order or By Product when delivery instructions are sent to Forwarders or Warehouse Operators. Delivery instructions for deliveries to customers or end-users may include purchase order and other customer or end-user references that should be printed on transport documents and supplied in delivery messages.

Status can be specified by InventoryClass. Unsound goods, i.e. goods that are damaged, downgraded etc. can be instructed to be delivered to brokers or moved back to warehouses or mills.

Goods are normally managed at a group level (order or product level). But also handling units (packages) can be specified. Unsound goods are often managed at the unit level.

Various details in goods handling can be specified to optimise the supply chain, e.g. direct loading, direct unloading, loading principles, loading tolerances, goods label orientation, delivery collect, etc.

It is highly recommended that a BusinessAcceptance is sent as a response to a DeliveryInstruction.

The Scope of the DeliveryInstruction

The DeliveryInstruction e-Document includes:

- A unique DeliveryInstructionNumber and issue date as DeliveryInstructionDate
- ShipTo Characteristics with ShipToParty and Terms of Delivery
- Delivery legs with Delivery Origin and Delivery Destination as well as details on transport mode, transport vehicle and transport unit. Various types of delivery date windows can be given, e.g. requested delivery date
- Loading and Unloading requirements
- Products and quantities to be delivered
- Classification or status of inventory and goods to be delivered
- Package information is normally not specified, but can be given if needed.
- Requirements on Co-Loading
- Information on transport documents
- Various parties such as Sender, Receiver, Buyer, BillTo, Supplier, Mill and Carrier. Additional parties involved can be specified by Other Party, e.g. Forwarder, Warehouse Operator, Freight Payer, Seller etc.

DeliveryInstructionType [attribute]

DeliveryInstructionType defines the type of DeliveryInstruction.

This item is restricted to the following list.

AvailabilityInstruction

An AvailabilityInstruction can specify many delivery events. Each event can contain quantity for one or many loads, but does not specify the load. A DeliveryInstruction type DeliveryInstruction specifies more details for the events in an AvailabilityInstruction. AvailabilityInstruction can also be handled by the company responsible for the delivery independently if so agreed.

DeliveryInstruction

A DeliveryInstruction can specify many delivery events. Each event can contain quantity for one or many loads. A sequence in a DeliveryInstruction specifies all details for one event. The receiver of a DeliveryInstruction can generate many Loading Instructions from one DeliveryInstruction.

LoadingInstruction

A Loading Instruction specifies loading of transport units. A Forwarder receiving a DeliveryInstruction from a supplier can convert it into many Loading Instructions, which are sent to a Warehouse Operator. A sequence in a Loading Instruction specifies all details how to load one transport unit. A Loading Instruction can include goods from many delivery instructions and also goods belonging to many suppliers.

Business Rules for DeliveryInstruction

General Business Rules

Identifier	Business Rule
DlvIns_001	Delivery Instruction messages must be processed in ascending date time order using DeliveryInstructionDate to ensure the correct processing of amendments and/or cancellations.
DlvIns_002	An e-Document with DeliveryInstructionStatusType Amended is accepted as the first e-Document when an Original e-Document is not processed.
DlvIns_003	SenderParty and ReceiverParty should have globally unique party identifiers, e.g. papiNetGlobalPartyIdentifier, DunsNumber.
DlvIns_004	ShipToCharacteristics is mandatory for DeliveryInstructionType DeliveryInstruction.
DlvIns_005	When InstructionByType is "ByMillOrder" then MillorderNumber and MillParty are mandatory on sequence line item.
DlvIns_006	When InstructionByType is "ByPurchaseOrder" thenPurchaseOrderInformation and BuyerParty are mandatory on sequence line item.
DlvIns_007	When InstructionByType is "ByProduct" then Product is mandatory on sequence line item.
DlvIns_008	Attribute AssignedBy is to be treated as mandatory when it appears in elements.
DlvIns_009	DeliveryInstructionSequence is mandatory when DeliveryInstructionStatusType is “Original” or “Amended”.

Processing the DeliveryInstruction

The processing of DeliveryInstruction depends on three status fields used within the document at the e-Document, header and sequence levels.

Status values used when processing DeliveryInstruction:

- DeliveryInstructionStatusType is used at the e-Document level
  - Amended - The supplied information is changed
  - 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.
- DeliveryInstructionHeaderStatusType is used at the Header level

  - Amended - The supplied information is changed.
  - 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.
  - New - The supplied information is new and supplied for the first time.
  - NoAction - The supplied information has not been amended and thereby requires no action.
- DeliveryInstructionSequenceStatusType is used at he Sequence level
  - 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
  - New – The supplied information is new and supplied for the first time.
  - NoAction - The supplied information has not been amended and thereby requires no action.
  - Replaced - The supplied information is replacing earlier supplied information. The receiver should revalidate the information in their system based upon the entire information received.

A sequence is always completely "Replaced" with all line items, if anything is changed. The Sequence keeps its sequence number but sequence line item numbers can be re-numbered. A sequence can't be "Replaced" or "Cancelled" if deliveries have already been executed against the sequence.

"Cancelled" sequences should be kept in amended e-Documents and always given the actual status of "Cancelled", that is, "NoAction" should not be used for a cancelled sequence.

A cancelled e-Document should have status "Cancelled" on both e-Document and header level as well as on all sequences if sequences are supplied. An e-Document can't be "Cancelled" if deliveries have already been executed against a sequence.

According to the business rules DeliveryInstruction e-Documents must be processed in ascending date time order using DeliveryInstructionDate to ensure the correct processing of amendments and/or cancellations. A DeliveryInstruction with DeliveryInstructionStatusType of "Amended" is accepted as the first e-Document when an "Original" e-Document is not processed.

It is highly recommended that a BusinessAcceptance is always sent as an response to a DeliveryInstruction.

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.

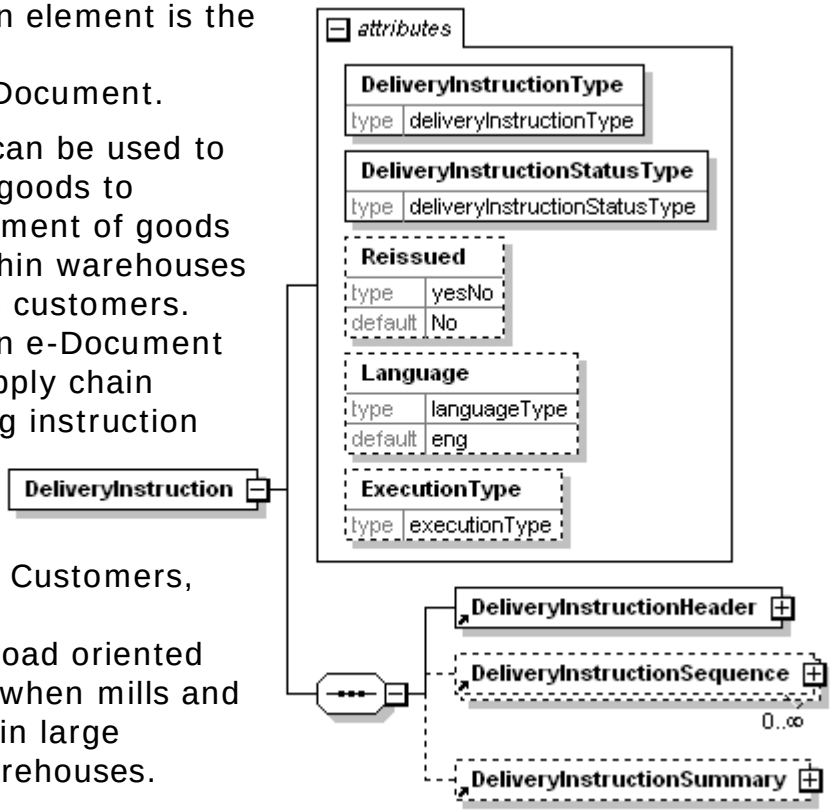
- When the content is textual/numeric in nature “three straight horizontal lines” will appear in the upper left-hand corner of the graphic. Pay attention to these elements because they are where you will be entering your information.
- When the content is made up of additional elements and/or attributes 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.

DeliveryInstruction Root Element

DeliveryInstruction

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

A DeliveryInstruction can be used to instruct movement of goods to warehouses and movement of goods to virtual locations within warehouses as well as deliveries to customers. The DeliveryInstruction e-Document is designed to fulfil supply chain requirements regarding instruction for goods deliveries to Mills, Suppliers, Forwarders, Warehouse Operators, Customers, and End-Users. The DeliveryInstruction is load oriented which is very efficient when mills and suppliers move goods in large quantities between warehouses.



DeliveryInstructionStatusType [attribute]

DeliveryInstructionStatusType is mandatory. A single instance is required.

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

This item is restricted to the following list.

Amended

The supplied information is changed.

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.

DeliveryInstructionType [attribute]

DeliveryInstructionType is mandatory. A single instance is required.

DeliveryInstructionType defines the type of DeliveryInstruction.

This item is restricted to the following list.

AvailabilityInstruction

An AvailabilityInstruction can specify many delivery events. Each event can contain quantity for one or many loads, but does not specify the load. A DeliveryInstruction type DeliveryInstruction specifies more details for the events in an

AvailabilityInstruction. AvailabilityInstruction can also be handled by the company responsible for the delivery independently if so agreed.

DeliveryInstruction

A DeliveryInstruction can specify many delivery events. Each event can contain quantity for one or many loads. A sequence in a DeliveryInstruction specifies all details for one event. The receiver of a DeliveryInstruction can generate many Loading Instructions from one DeliveryInstruction.

LoadingInstruction

A Loading Instruction specifies loading of transport units. A Forwarder receiving a DeliveryInstruction from a supplier can convert it into many Loading Instructions, which are sent to a Warehouse Operator. A sequence in a Loading Instruction specifies all details how to load one transport unit. A Loading Instruction can include goods from many delivery instructions and also goods belonging to many suppliers.

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.

ExecutionType [attribute]

Communicates the type of content of a DeliveryInstruction e-Document.

This item is restricted to the following list.

Fixed

Detailed specification of the delivery is given.

Open

Detailed specification of the delivery is not given. Quantities and delivery schedules will be specified by other means depending on the business process.

(sequence)

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

DeliveryInstructionHeader

DeliveryInstructionHeader is mandatory. A single instance is required.

The DeliveryInstructionHeader provides information that applies to the entire DeliveryInstruction.

DeliveryInstructionSequence

DeliveryInstructionSequence is optional. Multiple instances might exist.

The DeliveryInstructionSequence contains information about a loading or delivery event, depending on the type of DeliveryInstruction being communicated.

DeliveryInstructionSummary

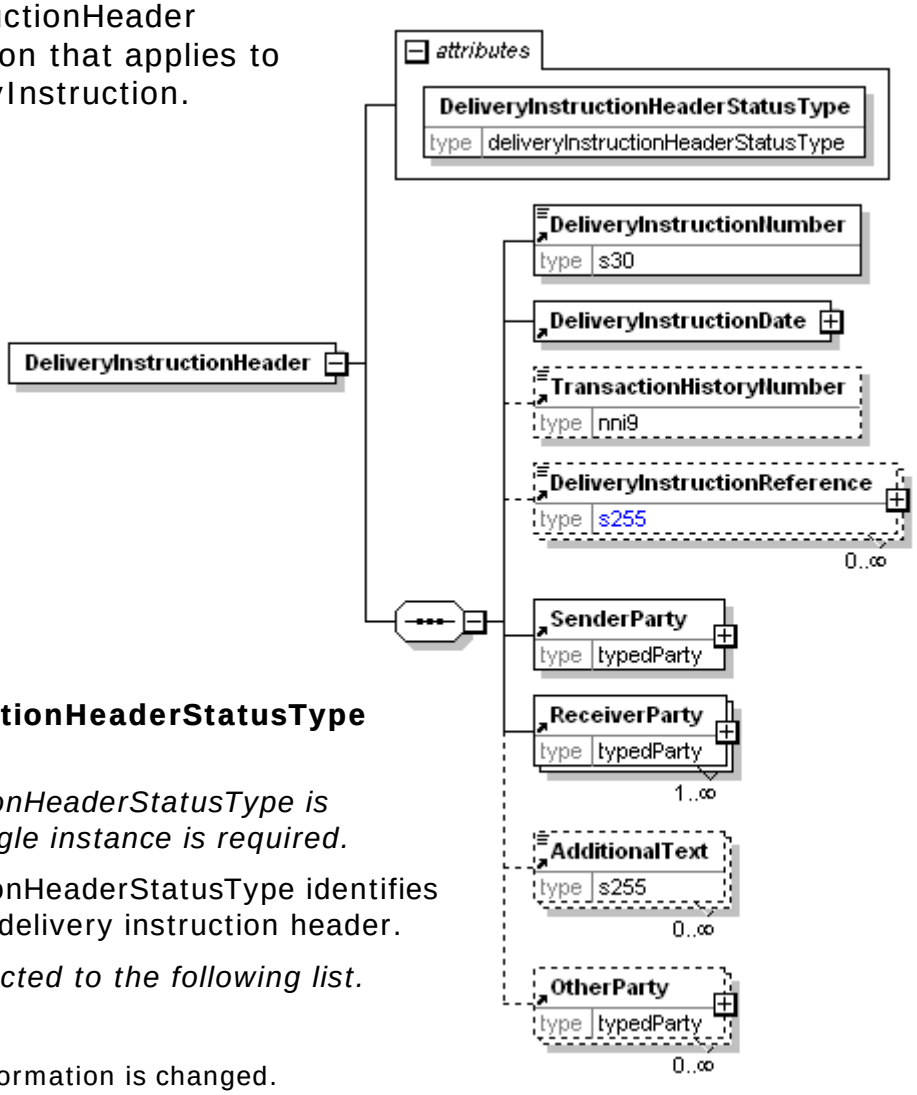
DeliveryInstructionSummary is optional. A single instance might exist.

The DeliveryInstructionSummary provides summary information used to verify the contents of the e-Document.

Primary Elements

DeliveryInstructionHeader

The DeliveryInstructionHeader provides information that applies to the entire DeliveryInstruction.



DeliveryInstructionHeaderStatusType [attribute]

DeliveryInstructionHeaderStatusType is mandatory. A single instance is required.

DeliveryInstructionHeaderStatusType identifies the status of the delivery instruction header.

This item is restricted to the following list.

Amended

The supplied information is changed.

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.

New

The supplied information is new and supplied for the first time.

NoAction

The supplied information has not been amended and thereby requires no action.

(sequence)

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

DeliveryInstructionNumber

DeliveryInstructionNumber is mandatory. A single instance is required.

The unique identifier for the DeliveryInstruction.

- Note: Usage of this item in the CoLoading element will be deprecated in a future version. Use CoLoadingReference with the DeliveryInstruction reference

type.

DeliveryInstructionDate

DeliveryInstructionDate is mandatory. A single instance is required.

The Date and Time when the DeliveryInstruction was issued.

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.

DeliveryInstructionReference

DeliveryInstructionReference is optional. Multiple instances might exist.

An element detailing relevant references pertaining to the DeliveryInstruction, as indicated by the DeliveryInstructionReferenceType and AssignedBy.

SenderParty

SenderParty is mandatory. A single instance is required.

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

- This is the same entity as the “From” party in the ebXML message service envelope. The entity responsible for the content. If the sender party has out sourced the transmission function to a third party the sender party is the original party not the party performing the transmission service.

ReceiverParty

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

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

- This is the same entity as the “To” party in the ebXML message service envelop. The entity interested in the content. If the receiver party has outsourced the message receipt function to a third party the receiver party is the intended party not the party performing the receiving process.

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.

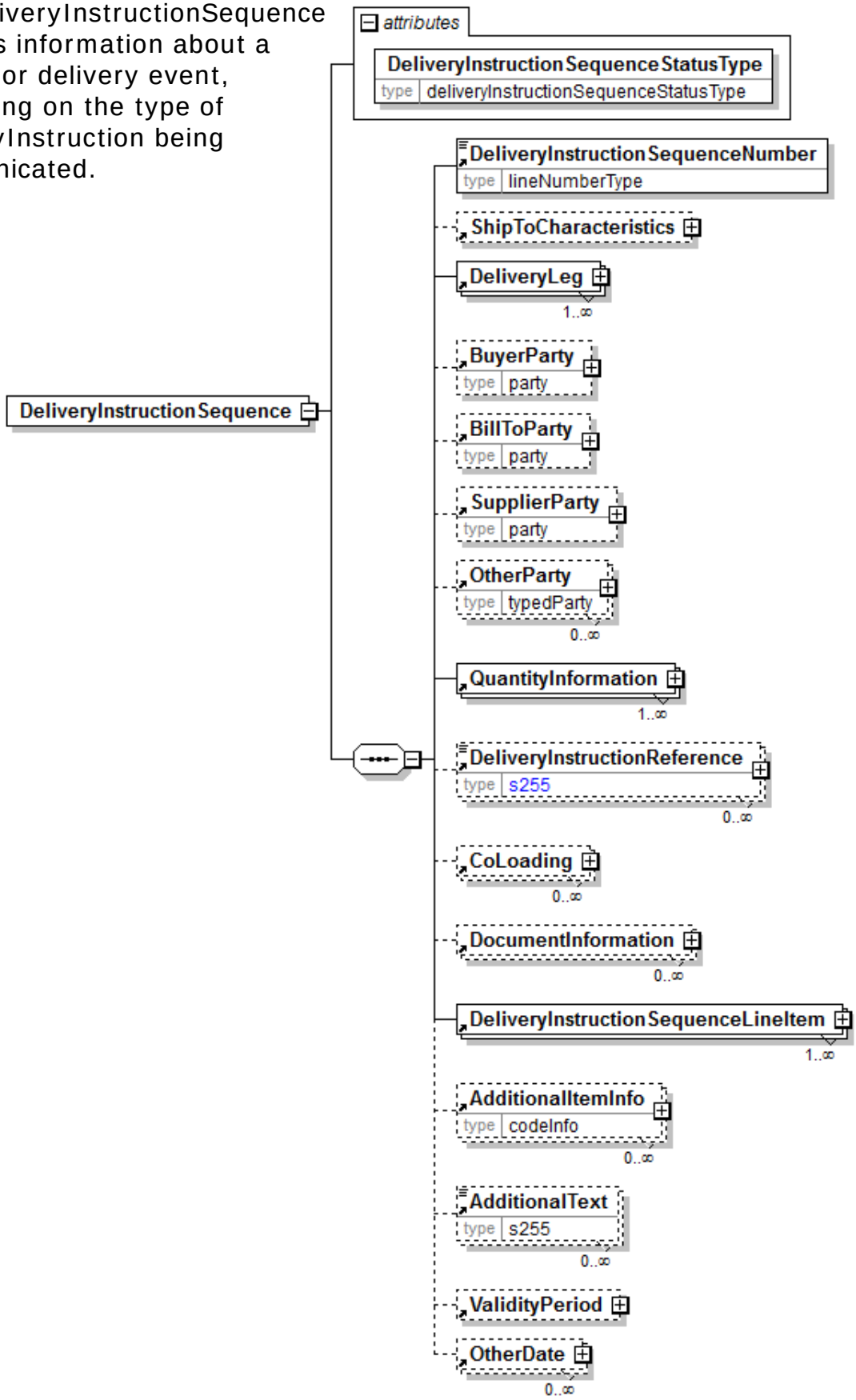
OtherParty

OtherParty is optional. Multiple instances might exist.

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

DeliveryInstructionSequence

The DeliveryInstructionSequence contains information about a loading or delivery event, depending on the type of DeliveryInstruction being communicated.



DeliveryInstructionSequenceStatusType [attribute]

DeliveryInstructionSequenceStatusType is mandatory. A single instance is required.

Delivery instruction sequence status type identifies the status of the delivery instruction sequence

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.

New

The supplied information is new and supplied for the first time.

NoAction

The supplied information has not been amended and thereby requires no action.

Replaced

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

(sequence)

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

DeliveryInstructionSequenceNumber

DeliveryInstructionSequenceNumber is mandatory. A single instance is required.

A sequential number that uniquely identifies the Sequence of a DeliveryInstruction.

- Note: Usage of this item in the CoLoading element will be deprecated in a future version. Use CoLoadingReference with the DeliveryInstructionSequenceNumber reference type.

ShipToCharacteristics

ShipToCharacteristics is optional. A single instance might exist.

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

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.

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.

QuantityInformation

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

A group item containing information about quantity and informational quantity of similar items.

DeliveryInstructionReference

DeliveryInstructionReference is optional. Multiple instances might exist.

An element detailing relevant references pertaining to the DeliveryInstruction, as indicated by the DeliveryInstructionReferenceType and AssignedBy.

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

Implementation Note: The following elements will be deprecated in an upcoming version. They are being retained to comply with papiNet backward compatibility requirements.

- DeliveryInstructionNumber - use CoLoadingReference with the appropriate CoLoadingReferenceType
- DeliveryInstructionSequenceNumber - Use CoLoadingReference with the appropriate ColLoadingReferenceType

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.

DeliveryInstructionSequenceLineItem

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

The group item DeliveryInstructionSequenceLineItem contains information for a line item of a delivery instruction sequence. The line item specifies detail information about product quantities, loading and unloading characteristics, order numbers and other references.

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.

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.

ValidityPeriod

ValidityPeriod is optional. A single instance might exist.

The validity period for a specific item, e.g. the validity period for an e-document.

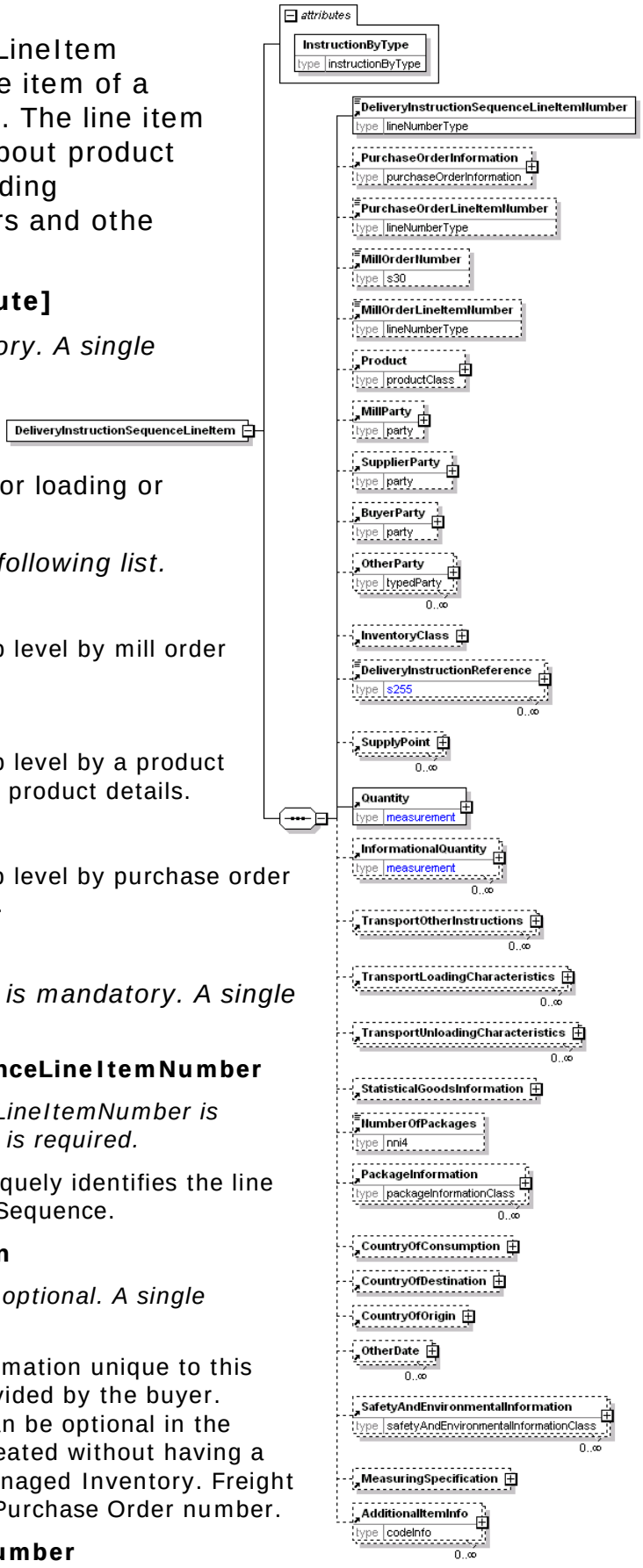
OtherDate

OtherDate is optional. Multiple instances might exist.

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

DeliveryInstructionSequenceLineItem

The group item DeliveryInstructionSequenceLineItem contains information for a line item of a delivery instruction sequence. The line item specifies detail information about product quantities, loading and unloading characteristics, order numbers and othe references.



InstructionByType [attribute]

InstructionByType is mandatory. A single instance is required.

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.

DeliveryInstructionSequenceLineItemNumber

DeliveryInstructionSequenceLineItemNumber is mandatory. A single instance is required.

A sequential number that uniquely identifies the line item of a DeliveryInstructionSequence.

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.

MillOrderNumber

MillOrderNumber is optional. A single instance might exist.

The manufacturing order number the mill uses.

MillOrderLineItemNumber

MillOrderLineItemNumber is optional. A single instance might exist.

A number that uniquely identifies the line items of the Mill Order.

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.

MillParty

MillParty is optional. A single instance might exist.

The organisation or business entity that actually produces the product.

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.

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.

OtherParty

OtherParty is optional. Multiple instances might exist.

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

InventoryClass

InventoryClass is optional. A single instance might exist.

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

DeliveryInstructionReference

DeliveryInstructionReference is optional. Multiple instances might exist.

An element detailing relevant references pertaining to the DeliveryInstruction, as indicated by the DeliveryInstructionReferenceType and AssignedBy.

SupplyPoint

SupplyPoint is optional. Multiple instances might exist.

Grouping element that contains items describing a supply point. A SupplyPoint belongs to a LocationParty, e.g. in a DeliveryOrigin or DeliveryDestination, and describes where goods are stored and can be loaded or unloaded. A SupplyPoint can for example be a loading or unloading gate at a warehouse or a road side landing at a logging area in the forest.

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. Multiple instances might exist.

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

TransportUnloadingCharacteristics

TransportUnloadingCharacteristics is optional. Multiple instances might exist.

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

StatisticalGoodsInformation

StatisticalGoodsInformation is optional. A single instance might exist.

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

NumberOfPackages

NumberOfPackages is optional. A single instance might exist.

The number of packages in the delivery.

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 entire contents of this element are optional even though the parent may be required. It is expected that you will fill in the appropriate details.

CountryOfConsumption

CountryOfConsumption is optional. A single instance might exist.

The country of consumption for the material.

CountryOfDestination

CountryOfDestination is optional. A single instance might exist.

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

CountryOfOrigin

CountryOfOrigin is optional. A single instance might exist.

The country of origin 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).

MeasuringSpecification

MeasuringSpecification is optional. A single instance might exist.

A grouping element that contains a specification for measurement procedures.

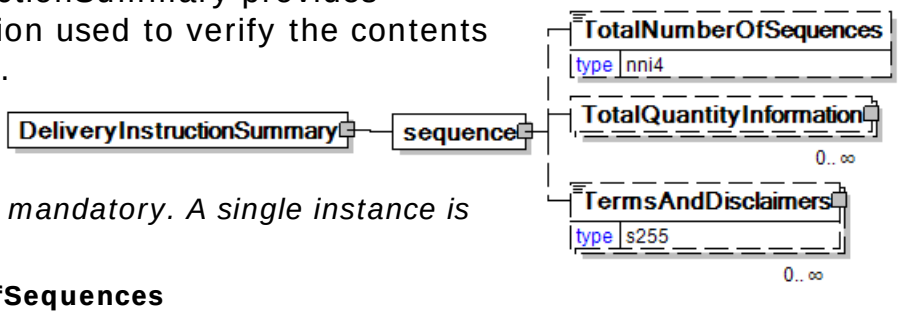
AdditionalItemInfo

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.

DeliveryInstructionSummary

The DeliveryInstructionSummary provides summary information used to verify the contents of the e-Document.



(sequence)

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

TotalNumberOfSequences

TotalNumberOfSequences is optional. A single instance might exist.

The total number of sequences in the document.

TotalQuantityInformation

TotalQuantityInformation is optional. Multiple instances might exist.

A group item containing information about the total quantity and total informational quantity of similar items in the document. TotalQuantityInformation is primarily used in the summary section of messages where it is repeatable to permit totalling for different units of measure.

TermsAndDisclaimers

TermsAndDisclaimers is optional. Multiple instances might exist.

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

DeliveryInstruction Business Scenarios

DeliveryInstruction Scenario Listing

Scenario A	Supplier instructs Forwarder to deliver goods from many mill orders from a warehouse to a local warehouse by vessel.
Scenario B	Forwarder instructs Warehouse Operator to load goods on a transport unit.
Scenario C	Supplier instructs Warehouse Operator to move goods that need to be invoiced, to a virtual location CustomerStock in the same warehouse.
Scenario D	Supplier instructs Warehouse Operator to deliver goods from two mill orders to a printer. Goods on one mill order are already invoiced.
Scenario E	Supplier instructs Warehouse Operator to return unsound goods to the mill.

Scenario A

e-Document	DeliveryInstruction
Type	DeliveryInstruction
Scenario	Supplier sends a DeliveryInstruction to the Forwarder to deliver goods from many mill orders from a warehouse to a local warehouse by vessel.
Outcome	Supplier has instructed goods to be delivered from a warehouse to a local warehouse.
Initiator	Supplier
Receiver	Forwarder
Preconditions	Goods are ordered and will be produced and stored in a warehouse.
XML File	The name of any sample file.
Trigger	Delivery planning initiates goods to be moved by vessel.
Step 1.	Supplier sends a DeliveryInstruction. • Goods can be produced for many Buyers, so BuyerParty is not supplied. • ShipToParty = Local warehouse • DeliveryInstructionSequence specifies

	Delivery leg and requested delivery date • TransportVehicleCharacteristics = Vessel characteristics • TransportUnitCharacteristics = Cassette characteristics (optional) • DeliveryOrigin specifies From Warehouse • SequenceLineItem specifies mill order, mill party, product, quantity (typical number of packages) and requirements on loading and unloading. • GoodsStatus is not supplied. Default is Sound goods and goods owned by supplier. • PackageInformation is not supplied.
Step 2.	Forwarder posts the DeliveryInstruction into their ERP and optionally sends a Business Acceptance to Supplier.
Step 3.	Forwarder executes the DeliveryInstruction. Loading Instructions are sent to the Warehouse Operator.
Results	The goods will be loaded and delivered to a local warehouse by vessel. Delivered goods will be specified by a delivery message with type ShipmentAdvice to the supplier.

Scenario B

e-Document	DeliveryInstruction
Type	LoadingInstruction
Scenario	Forwarder instructs Warehouse Operator to load goods on a transport unit.
Outcome	Forwarder has instructed goods to be loaded on a transport unit.
Initiator	Forwarder
Receiver	Warehouse Operator
Preconditions	Forwarder has got DeliveryInstructions from a paper suppliers
Trigger	Goods should be delivered and need to be loaded.
Step 1.	Forwarder creates and optimises a load from a DeliveryInstruction. Forwarder sends a Loading

	Instruction for the load. • Many objects are optional when only loading is instructed. ShipToParty and DeliveryDestination are not required. • DeliveryInstructionSequence specifies Delivery leg with CarrierParty and Characteristics of transport vehicle and unit • DeliveryOrigin specifies Loading Date and From Warehouse • SequenceLineItem specify mill order, mill party, product, quantity and requirements on loading and unloading. • GoodsStatus is not supplied. Default is Sound goods and goods owned by supplier. • PackageInformation is not supplied.
Step 2.	Warehouse Operator posts the Loading Instruction into their ERP and optionally sends a Business Acceptance to Forwarder.
Step 3.	Warehouse Operator executes the loading instruction and loads the transport unit.
Results	The goods will be loaded and loaded goods will be specified on unit level by a Delivery Message with type Loaded Specification to forwarder. The Forwarder will print Transport documents and dispatch the load.

Scenario C

e-Document	DeliveryInstruction
Type	DeliveryInstruction
Scenario	Supplier instructs Warehouse Operator to move goods that need to be invoiced, to a virtual location CustomerStock in the same warehouse.
Outcome	Supplier has instructed goods to be moved to a virtual location CustomerStock so that it later can be invoiced on package level.
Initiator	Supplier
Receiver	Warehouse Operator
Preconditions	Goods are stored in the warehouse or will later be delivered to the warehouse.

Trigger	Goods in warehouse should be invoiced on package level.
Step 1.	Supplier sends a DeliveryInstruction. • SupplierParty, BuyerParty and BillToParty are supplied. • ShipToParty is the warehouse where the goods will be moved to (In this case the same as where it is stored). @PartyType "CustomerStock" specifies a virtual location for customer owned stock. • DeliveryInstructionSequence specifies Delivery leg and requested delivery date • DeliveryOrigin specifies the warehouse where goods are stored. • DeliveryDestination LocationParty is the same as ShipToParty • SequenceLineItem specify mill order, mill party, product and quantity to be moved. • GoodsStatus is not supplied. Default is Sound goods and goods owned by supplier. • PackageInformation is not supplied.
Step 2.	Warehouse Operator posts the DeliveryInstruction into their ERP and optionally sends a Business Acceptance to Supplier.
Step 3.	Warehouse Operator executes the DeliveryInstruction and moves the goods to "CustomerStock".
Results	The goods will be moved to "CustomerStock". Moved goods will be specified to the supplier on package level by a Delivery Message with type ShipmentStatus. The supplier informs the customer by a Delivery Message the change of status and can then invoice goods on package level.

Scenario D

e-Document	DeliveryInstruction
Type	DeliveryInstruction
Scenario	Supplier instructs Warehouse Operator to deliver goods from two mill orders to a printer. Goods on one mill order are already invoiced.

Outcome	Supplier has instructed goods to be delivered to a printer. Goods owned by the customer and goods not yet invoiced will be handled separately.
Initiator	Supplier
Receiver	Warehouse Operator
Preconditions	Goods are ordered, partly invoiced and stored in a warehouse.
XML File	The name of any sample file.
Trigger	The customer has issued a CallOff for products to be delivered to the printer.
Step 1.	Supplier sends a DeliveryInstruction. • SupplierParty and BuyerParty are supplied. • ShipToParty is the printer facility. • DeliveryInstructionSequence specifies Delivery leg and requested delivery date • DeliveryOrigin specifies the warehouse where goods goods should be loaded. • DeliveryDestination LocationParty is the same as ShipToParty • SequenceLineItem specify mill order, mill party, product, quantity and requirements on loading and unloading. • GoodsStatus is supplied for mill orders with already invoiced goods. @GoodsOwnedBy specifies that goods invoiced and owned by customer should be delivered. Default is goods owned by supplier. • Customer numbers and references from Purchase Order and CallOff are supplied to be printed on transport documents. • PackageInformation is not supplied.
Step 2.	Warehouse Operator posts the DeliveryInstruction into their ERP and optionally sends a Business Acceptance to Supplier.
Step 3.	Warehouse Operator executes the DeliveryInstruction and delivers the specified products according to the specification.
Results	The goods will be delivered to the printer. Delivered goods will be specified to the supplier

	on package level by a Delivery Message. The customer can see what items are already invoiced and can update stock records accordingly.

Scenario E

e-Document	DeliveryInstruction
Type	DeliveryInstruction
Scenario	Supplier instructs Warehouse Operator to return unsound goods to the mill.
Outcome	Supplier has instructed unsound goods to be returned to the mill. Unsound units are specified.
Initiator	Supplier
Receiver	Warehouse Operator
Preconditions	Unsound goods are stored in a warehouse.
XML File	The name of any sample file.
Trigger	The supplier has found that some damaged packages can be rewound to new sizes and be sold.
Step 1.	Supplier sends a DeliveryInstruction. • Goods can be produced for many Buyers, so Buyerparty is not supplied. • ShipToParty is MillParty. • DeliveryInstructionSequence specifies Delivery leg and requested delivery date • DeliveryOrigin specifies the warehouse where goods should be loaded. • DeliveryDestination LocationParty is the same as ShipToParty • SequenceLineItem specify mill order, mill party, product, quantity and requirements on loading and unloading. • GoodsStatus is specified. @GoodsStatusType is "Unsound". GoodsStatusDetail specifies in detail via GoodsStatusCode what damages can be accepted. Goods Status Codes have been agreed in a Trading Partner Agreement. • Supplier references are supplied in DeliveryInstructionReference.

	• PackageInformation specifies packages to be returned to mill.
Step 2.	Warehouse Operator posts the DeliveryInstruction into their ERP and optionally sends a Business Acceptance to Supplier.
Step 3	Warehouse Operator executes the DeliveryInstruction and returns the specified units to mill.
Results	The unsound goods will be returned to the mill. Returned goods will be specified to the supplier on package level by a Delivery Message.