

# papiNet

# **Inventory Disposition Instructions**

# 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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# **Table of Contents**

Copyright	2
Use of Documents in papiNet Implementations	2
Additional Copyright Information	
Table of Contents	
InventoryDispositionInstructions Documentation	5
An Overview of the InventoryDispositionInstructions Message	
The Scope of Inventory Disposition Instructions Message	5
InventoryDispositionInstructionsType [attribute]	
Business Rules for InventoryDispositionInstructions	6
InventoryDispositionInstructions Structure	
Understanding the Diagrams and Content	7
Inventory Disposition Instructions Root Element	10
InventoryDispositionInstructions	10
Primary Elements	11
InventoryDispositionInstructionsHeader	11
InventoryDispositionInstructionsDetail	12
InventoryDispositionInstructions Business Scenarios	15
InventoryDispositionInstructions Scenario Listing	15
Scenario A	15
Scenario B	16
Scenario C	17
Scenario D	17

### InventoryDispositionInstructions Documentation

#### An Overview of the InventoryDispositionInstructions Message

The purpose of the InventoryDispositionInstructions message is for the owner of inventory stored at a third party location to request the inventory be destroyed, shipped to another location, held in inventory, or physically changed. The receiving party makes the requested changes to the inventory and sends an InventoryChange Message and ShippingInstructions, if required, to the requestor so their systems can be updated.

The parties sending and receiving the message can be different. As well as supporting the reporting relationship between a publisher owning stock at a printer or a warehouse operator and a supplier the message can also support a Paper Mill Vendor Managed Inventory at a printer.

The types of dispositions that can be reported through the inventory change message are:

- Slitting Paper or cutting rolls to sheets.
- Shipment from the current printer location to another location.
- Request to hold excess inventory from a job for future production.
- Request to destroy excess raw materials or Work in Process that will not be used by the owner (publisher).

Prior to implementing the InventoryDispositionInstructions message it is assumed that the parties involved have already opened a dialogue and a collaborative agreement has been reached. Such an agreement would include business use of messages, content detail, units of measure, and other areas. Additionally, agreement on when and how to use the message between the parties will have been reached. Based on these agreements a trading partner sends an InventoryDispositionInstructions message to another trading partner on the event basis agreed to.

# The Scope of Inventory Disposition Instructions Message

The InventoryDispositionInstructions message can include:

- Product specifications, such as product identifier.
- Warehouse/customer locations.
- Product details such as width, diameter, pallet size, etc.'
- Reel ID/Package ID

The InventoryDispositionInstructions message must include:

- InventoryDispositionInstructionsType, indicating the type of disposition
- ProductIdentifier

# InventoryDispositionInstructionsType [attribute]

Indicates the type of inventory disposition that is required. As this attribute is at the line level multiple dispositions can be communicated in a single message.

 attribute

 InventoryDispositionInstructionsType

 type

 inventoryDispositionInstructionsType

This item is restricted to the following list.

#### Scrap

Raw Material or Work in Process to be scrapped.

#### Destroy

Finished Goods or Work in Process containing copyrighted information that must be physically destroyed.

#### Hold

Excess raw materials, Work in Process, or Finished Goods that should be held for future production or until other Disposition Instructions are received at the current location .

#### Transfer

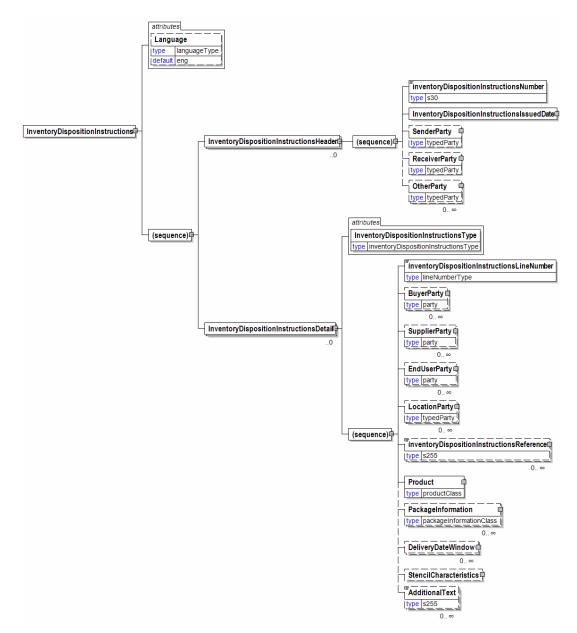
Raw materials or Work in Process that will be shipped to another location.

# **Business Rules for InventoryDispositionInstructions**

#### General Business Rules

The following table lists the business rules that apply to all Inventory message types. Rules that apply to a single inventory Disposition Instructions message type are described in separate tables.

Identifier	Business Rule
IC001	Inventory Disposition Instructions message line requires a Disposition Instructions type.
1C002	The Inventory Disposition Instructions message can originate from any trading party. The business flow is the same regardless of sender or receiver.
1C003	An amendment to the Inventory Disposition Instructions message is handled through a new message.



# InventoryDispositionInstructions Structure

### **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.

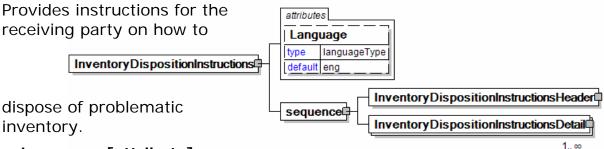
• In some cases additional information about the data type is presented (the default value).

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.

# **Inventory Disposition Instructions Root Element**

# InventoryDispositionInstructions



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

#### InventoryDispositionInstructionsHeader

InventoryDispositionInstructionsHeader is mandatory. A single instance is required.

Provides information that is common for the instructions on how to dispose of problematic inventory.

#### InventoryDispositionInstructionsDetail

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

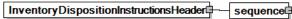
InventoryDispositionInstructionsDetail provides information about the product to be disposed of and the method of disposal.

### **Primary Elements**

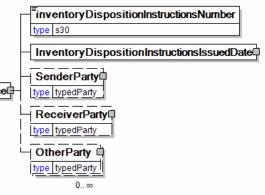
### InventoryDispositionInstructionsHeader

Provides information that is common for the instructions on how to dispose of problematic inventory.

#### (sequence)



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



#### InventoryDispositionInstructionsNumber

InventoryDispositionInstructionsNumber is mandatory. A single instance is required.

The identifying number for the Inventory Disposition message.

#### InventoryDispositionInstructionsIssuedDate

InventoryDispositionInstructionsIssuedDate is mandatory. A single instance is required.

The date that the disposition instructions were issued.

#### SenderParty

SenderParty is optional. A single instance might exist.

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 optional. A single instance might exist.

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

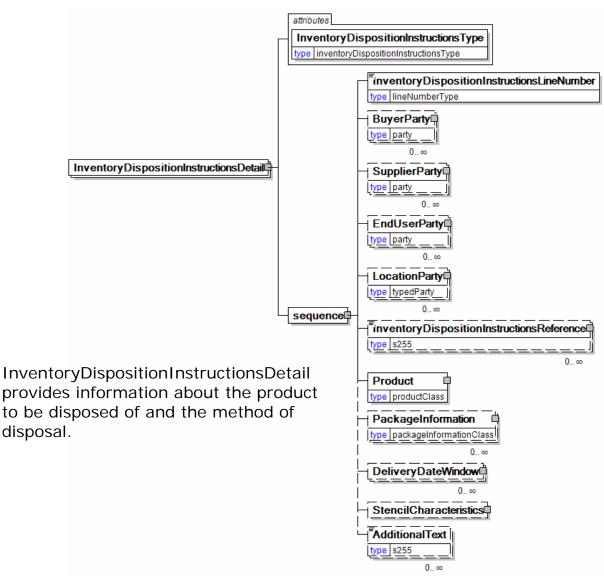
• This is the same entity as the "To" party in the ebXML message service envelop. The entity interested in the content. If the receiver party has outsourced the message receipt function to a third party the receiver party is the intended party not the party performing the receiving process.

#### OtherParty

OtherParty is optional. Multiple instances might exist.

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





#### InventoryDispositionInstructionsType [attribute]

InventoryDispositionInstructionsType is mandatory. A single instance is required.

Indicates the type of inventory disposition that is required. As this attribute is at the line level multiple dispositions can be communicated in a single message.

This item is restricted to the following list.

#### Scrap

Raw Material or Work in Process to be scrapped.

#### Destroy

Finished Goods or Work in Process containing copyrighted information that must be physically destroyed.

#### Hold

Excess raw materials, Work in Process, or Finished Goods that should be held for future production or until other Disposition Instructions are received at the current location .

#### Transfer

Raw materials or Work in Process that will be shipped to another location.

#### (sequence)

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

#### InventoryDispositionInstructionsLineNumber

InventoryDispositionInstructionsLineNumber is mandatory. A single instance is required.

The sequential number that uniquely identifies the inventory disposition instructions line item.

#### **BuyerParty**

BuyerParty is optional. Multiple instances might exist.

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

#### SupplierParty

SupplierParty is optional. Multiple instances 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.

#### EndUserParty

EndUserParty is optional. Multiple instances might exist.

The party using, consuming, or converting the product. For example, a printer using paper reels for a print job for a publisher. The final ShipTo destination for a product is normally to the end user's facilities.

#### LocationParty

LocationParty is optional. Multiple instances might exist.

The organization or business entity where the business event took place or will take place.

#### InventoryDispositionInstructionsReference

InventoryDispositionInstructionsReference is optional. Multiple instances might exist.

Contains references that pertain to the InventoryDispositionInstructions message.

#### 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.

#### **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.

#### DeliveryDateWindow

#### DeliveryDateWindow is optional. Multiple instances might exist.

A group item defining the date/time interval for delivery to take place. An element which may contain the estimated date for which delivery is expected. This date is not absolute.

#### **StencilCharacteristics**

StencilCharacteristics is optional. A single instance might exist.

A group element specifying attributes of a stencil to be applied to an item, and optional text.

#### 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.

# InventoryDispositionInstructions Business Scenarios

### InventoryDispositionInstructions Scenario Listing

Scenario A	Paper owned by publisher, held at printer location, to be scrapped.
Scenario B	Paper owned by publisher, held at one printer location, to be shipped to another printer location.
Scenario C	Extra covers from job, owned by publisher, held at printer location, to be held for future printing.
Scenario D	Finished excess book sections held at printer location to be destroyed.

# Scenario A

Message	InventoryDispositionInstructions
Туре	Scrap
Scenario	Publisher requests that butt roll in publisher's inventory at printer location be scrapped.
Outcome	Paper is scrapped; inventory figures at printer and publisher are updated
Initiator	Publisher/Customer
Receiver	Printer/Supplier
Trigger	Inventory Status report from printer location to publisher shows 1 butt roll of Paper Grade, no longer used, in inventory
Step 1.	Publisher/Customer sends an InventoryDispositionInstructions message with the type scrap to the supplier.
	The following information included in the InventoryDispositionInstructions message is particular to this Use Case. InventoryDispositionInstructions Type Sender Receiver Product Identifier Quantity

Step 2.	Message received by Printer/Supplier; sections are destroyed.
Step 3.	Destroyed quantity entered in supplier ERP updating inventory quantity for Text Sections to 0. This also generates an InventoryChange Message to the Publisher/Customer with an InventoryChangeType of Destroy.

# Scenario B

InventoryDispositionInstructions
Transfer
Publisher requests that paper in publisher's inventory at printer location be sent to another printer location.
Paper is shipped from Printer holding paper (Printer A)to another Printer Location (Printer B). Inventory Change and Delivery message are sent by Printer "A" enabling Publisher to update ERP.
Publisher/Customer
Printer/Supplier
What exists prior to the start?
The name of any sample file.
Publisher ERP determines required paper for job at Printer B is available and unallocated at Printer A.
Publisher sends InventoryDispositionInstructions message to Printer A.
The following information included in the InventoryDispositionInstructions message is particular to this Use Case. • Sender • Receiver • InventoryDispositionInstructions Type • Product information • Quantity

Page: 16 of 18 Production Release

	ShipTo Location
Step 2.	Message received by Printer A. Paper is shipped to Printer B. InventoryChange message is sent to Publisher. DeliveryMessage is sent to printer B with a copy to Publisher.

# Scenario C

Message	InventoryDispositionInstructions
Туре	Hold
Scenario	Extra covers at printer to be held for future jobs.
Outcome	No change to quantity of Covers in Printer and Publisher ERP Inventory Systems.
Initiator	Publisher/Customer
Receiver	Printer/Supplier
Preconditions	InventoryStatus message from Printer to Publisher has Covers with QuantityTypeContext of Balance.
Trigger	Production of Books ordered is completed and there are excess covers.
Step 1.	Publisher sends message to Printer. The following information included in the InventoryDispositionInstructions message is particular to this Use Case. • Sender • Receiver • InventoryDispositionInstructions Type • Product information • Quantity
Step 2.	Message received by Printer and classification of stock is updated in ERP.

# Scenario D

Message	InventoryDispositionInstructions
Туре	Destroy

Scenario	Publisher has printed book sections at a Printer location that must be destroyed because they contain copyrighted material.
Outcome	Text Section is Destroyed; inventory figures at printer and publisher are updated
Initiator	Publisher/Customer
Receiver	Printer/Supplier
Preconditions	Excess text sections produced were being held in inventory.
XML File	The name of any sample file.
Trigger	Publisher ERP shows no future demand for this inventory.
Step 1.	Publisher/Customer sends an InventoryDispositionInstructions message with the type destroy to the Printer/Supplier. The following information included in the InventoryDispositionInstructions message is particular to this Use Case. InventoryDispositionInstructions Type Sender Receiver Product Identifier Quantity
Step 2.	Message received by supplier and customer and downgraded stock updated in supplier and Customer ERP and correct stock figures are obtained in respective ERP. Message also generates info for further actions, costs and tracking in supplier ERP