PapiNet WoodX implementation guide

DeliveryMessageWood
MessageType: DeliveryMessage
MessageType: PackageSpecification

DeliveryMessageWood V2.31

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1.   INTRODUCTION

1.1   Purpose of this document

PapiNet WoodX is a segment user group (SUG) within papiNet that is maintaining a message transaction standard within the wood products supply chain.

The intention of this document is to facilitate for a user to implement the WoodX-message. In addition, it aims to ensure that the message is implemented in a way that creates the best possible functionality of the message for all the users and parties in the supply chain. The real benefits of e-business can only be achieved via harmonized message implementations and use cases. The harmonization can be assured by users following the implementation instructions.

This document describes the common use case for the *DeliveryMessageWood Types DeliveryMessage and PackageSpecification* e-documents. It can be used as a guideline for implementations, together with the related ISS excel file containing the schema subset including enumeration, rules and remarks for each element. For more information about elements and attributes we recommend to use the common PapiNet DataDictionary.

1.2   PapiNet WoodX messages

In this paragraph is described the relations between different business transactions and PapiNet WoodX e-messages and message types.

Below are given the overviews of two different business transaction cases. These two are the most typical business transaction cases in trading wood products in Europe. The first case describes the traditional trade flow of wood product in Europe. In this case, the business transaction starts with purchase order sent by the buyer (see Figure 1.). The latter case describes the business transaction that is typical when trading wood products to builder merchants. In this case it is typical that the seller and buyer have interchanged "article list" and corresponding "price lists" according to the business agreements (see Figure 2.).

In the figures, the business transactions are shown on the left, and the arrows indicate the sender and receiver of a message. On the right are listed the PapiNet WoodX e-messages and message types suitable for the business transactions.

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Figure 1. Traditional trade flow of wood products (CASE 1)
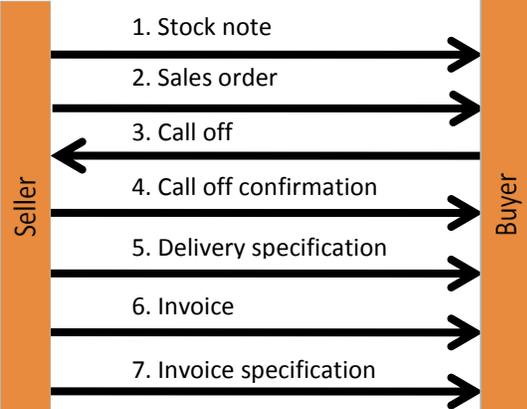
Business Transactions	Message	MessageType
1. Stock note 2. Sales order 3. Call off 4. Call off confirmation 5. Delivery specification 6. Invoice 7. Invoice specification (Seller → Buyer)	1. Availability	1. -
	2. OrderConfirmationWood	2. Agreement
	3. CallOffWood	3. CallOff
	4. CallOffWood	4. CallOffConfirmation
	5. DeliveryMessageWood	5. DeliveryMessage
	6. InvoiceWood	6. Invoice CreditNote/DebetNote
	7. DeliveryMessageWood	7. PackageSpecification

Figure 2. The business transaction of trading wood products to a builder merchant (CASE 2)
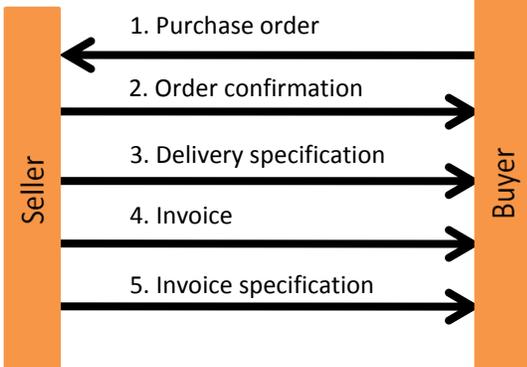
Business Transactions	Message	MessageType
1. Purchase order 2. Order confirmation 3. Delivery specification 4. Invoice 5. Invoice specification (Seller ↔ Buyer)	1. PurchaseOrderWood	1. PurchaseOrder
	2. OrderConfirmationWood	2. StandardOrder
	3. DeliveryMessageWood	3. DeliveryMessage
	4. InvoiceWood	4. Invoice CreditNote/DebetNote
	5. DeliveryMessageWood	5. PackageSpecification

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2. USE CASES OF DELIVERY SPECIFICATION & INVOICES SPECIFICATION

The DeliveryMessageWood-messages has two message types, which are DeliveryMessage and PackageSpecification. The use cases of the both message types are described below.

2.1 Delivery specification (DeliveryMessageType:DeliveryMessage)

When a truck or train leaves the supplier's warehouse with a delivery that goes direct to a "ship-to party", the "ship-to party" can receive a delivery specification for each delivery.

The ship-to party can then create a goods receipt in their ERP-system at arrival of the delivery, via the information in the message.

It can be one or many Delivery Specification for each order depending on the number of deliveries.

The DeliveryMessageWood type DeliveryMessage specifies all the details of the packages that belong to the specific Delivery Specification.

2.1 Invoices Specification (DeliveryMessageType:PackageSpecification)

When a buyer receives an invoice from the seller, there might be a need of more detailed information about the packages on the deliveries that is invoiced.

A seller can send an Invoices Specification to one or more receivers, including the buyer and/or ship-to parties.

The receiver normally uses the Invoices Specification for:
1. Checking the content of the Invoice at the receipt of the packages before paying the invoice
2. Using the message to create goods receipt in the ERP-system. This is normally done via a Delivery Specification, but in the case when the Invoice arrives before the goods and all packages belonging to an invoice arrives at the same time, it this possible to use the Invoice Specification.

The DeliveryMessageWood type PackageSpecification specifies all the details of the packages that belong to the specific Invoices Specification.

3. OVERVIEW OF DELIVERYMESSAGEWOOD MESSAGE STRUCTURE

The figure below describes the DeliveryMessageWood-message structure
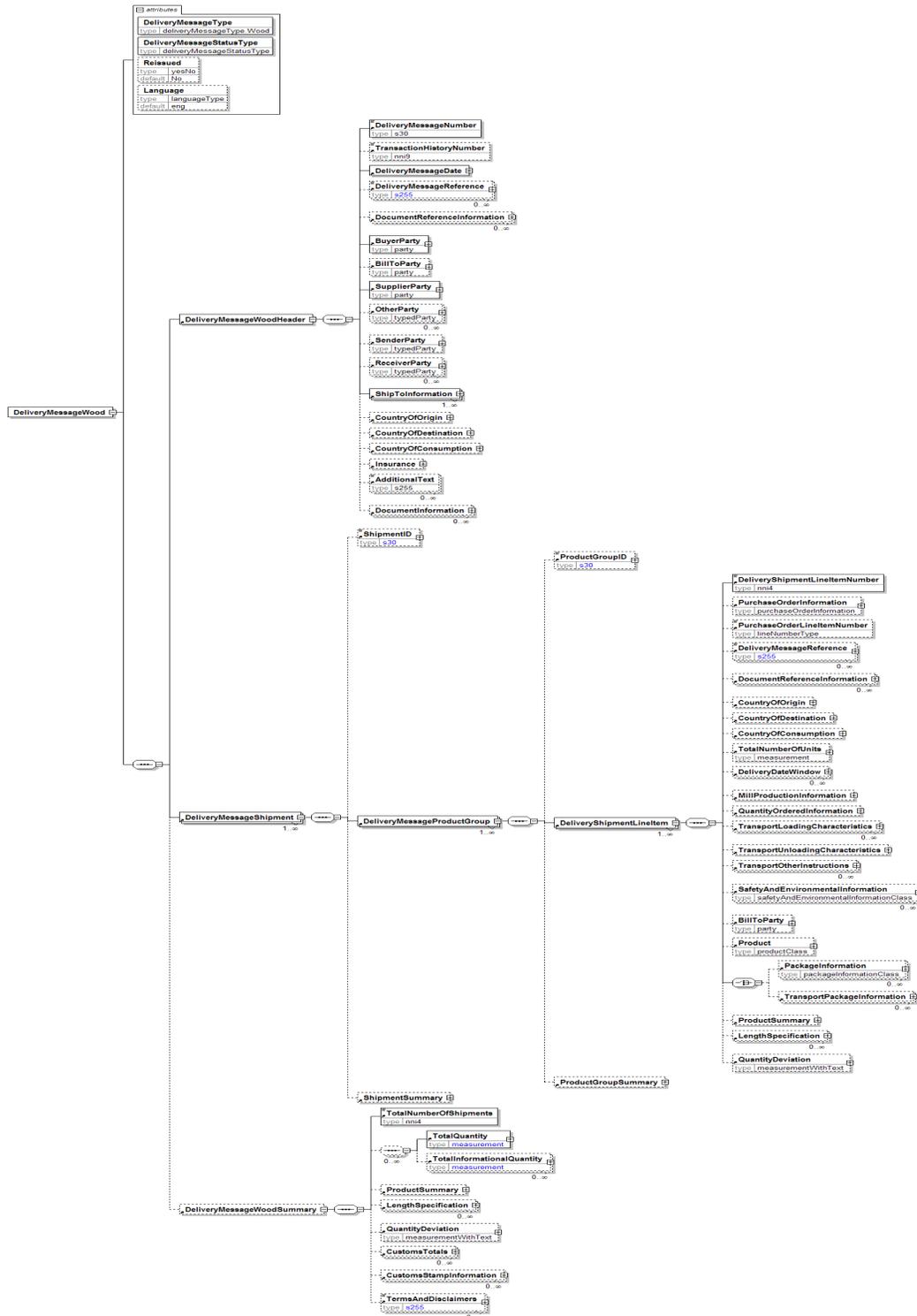
4. E-DOCUMENT CONTENT

4.1 General

In this chapter there is an overview of the E-document. Elements are mentioned in basic level and the given text refers to the structure, eg. Partytype, AssignedBy. For detailed information of the elements in the XML-schema for the DeliveryMessageWood -message look at the related ISS excel documentation called implementation subset spreadsheet for DeliveryMessageWood.

Columns should be read as follows:

Data Item	data item name as documented in papiNet WoodX messages
Data description	data item as defined in papiNet Data Dictionary with WoodX specific definitions
M	mandatory data item

4.2 Root

Data Item	Description
DeliveryMessageWood (M)	The root. This element contains the entirety of the DeliveryMessageWood document.
- DeliveryMessageType (M)	DeliveryMessageType defines the type of delivery message.
- DeliveryMessageStatusType (M)	Identifies the status of the entire delivery message, in other words at the root level

4.3 Header

Data Item	Description
- DeliveryMessageWoodHeader (M)	This element contains the information that is consistent for the entire DeliveryMessageWood document.
- - DeliveryMessageNumber (M)	A unique delivery identifier assigned to each DeliveryMessage as agreed between the trading partners.
- - DeliveryMessageDate (M)	The Date when the message was issued.
- - DeliveryMessageReference (M)	An element that identifies the relevant references pertaining to the delivery message, identified by DeliveryMessageReferenceType and AssignedBy.
- - BuyerParty (M)	The legal entity to which the product is sold. Also commonly referred to as the sold-to party or customer.
- - - PartyIdentifier (M)	A unique identifier of a specific party. This element contains an attribute PartyIdentifierType that indicates the type of party.
- - - - PartyIdentifierType (M)	Provides a contextual definition for the party identifier value. This party identifier enables the trading partners to use ID codes for the different organisation versus business entities involved in the transaction.
- - - NameAddress (M)	A group item containing name and address of an organisation or business entity.
- - SupplierParty (M)	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.

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Data Item	Description
- - OtherParty (M)	An organisation or business entity other than those specifically detailed within a business document.
- - SenderParty (M)	The business entity issuing the business document, the source of the document.
- - ReceiverParty (M)	The business entity for whom the business document is intended, the destination of the document.
- - ShipToInformation (M)	Group element containing information about the ship to and delivery of a product.
- - - ShipToCharacteristics (M)	A group item that provides information important for the ShipTo Party.
- - - - ShipToParty (M)	The name and/or address to which the goods should be delivered with the party type indicated by the PartyType attribute.
- - - - TermsOfDelivery	A group item defining the terms under which the delivery of goods will take place. These terms determine when and under what conditions the transfer of ownership will occur. Generally speaking, the Incoterms are primarily used in Europe, whereas the ShipmentMethodOfPayment is primarily used in North America.
- - - - - - IncotermsLocation	Place linked to terms of delivery showing the place where goods are to be delivered.

4.4 Shipment

Data Item	Description
- DeliveryMessageShipment (M)	The DeliveryMessageShipment specifies an individual shipment. It is possible to make shipment grouping for invoiced items.
- - ShipmentID	This is the first grouping element mainly used for creating grouping levels in documents
- - DeliveryMessageProductGroup (M)	Product grouping for invoiced items.
- - - ProductGroupID	This is the second grouping element mainly used for creating grouping levels in documents
- - - DeliveryShipmentLineItem (M)	The DeliveryShipmentLineItem specifies an individual delivery line for one order and order line item.
- - - - DeliveryShipmentLineItem Number (M)	Sequential number to identify individual line items within a shipment
- - - - PurchaseOrderInformation	A group item containing information unique to purchase order.
- - - - - PurchaseOrderNumber	The unique order identifier as designated by the customer.
- - - - PurchaseOrderLineItem Number	The sequential number that uniquely identifies the purchase order line item.
- - - - DeliveryMessageReference	An element that identifies the relevant references pertaining to the delivery message, identified by DeliveryMessageReferenceType.
- - - - SafetyAndEnvironmental Information	Use this to define certificate of the goods. Structure needs a value or measurement to communicate the percentage of the product is certified, eg 75% is certified by the indicated agency.
- - - - - SafetyAndEnvironmental	The type of safety and environmental information being

Data Item	Description
Type (M)	communicated. Defines any additional information relating to safety and/or environmental matters.
- - - - - SafetyAnd EnvironmentalCertification	Safety and Environmental Certification
- - - - Product (M)	Product is a group item defining the article and its characteristics. Product is used to specify product characteristics organized by ProductIdentifier, ProductDescription, and Classification.
- - - - - - ProductIdentifier (M)	Used to communicate the code of the article, in a variety of formats designated by the type.
- - - - - - ProductDescription (M)	An element used to communicate a human readable description of the product in the language specified by the Language attribute.
- - - - - TransportPackage Information	Information of a package used in transportation, can include several normal packages.
- - - - - - PackageType (M)	The type of packages that the products are delivered in; LP, TP etc.
- - - - - - Identifier (M)	An Identifier is required for packages and items. The Identifier element contains the actual item identifier code. Identifier is repeatable so more than one identifier can be communicated. For example, the printed identifier on a label may be different from the barcode printed on the label.
- - - - - - ItemCount (M)	A count of the number of items within the packages.
- - - - - - Quantity (M)	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	A quantity given in a valid UOM used for information purposes only (not for calculation).
- - - - - - TransportUnit Characteristics	A group item defining and identifying the primary means of containing the goods. In some instances, the transport unit and vehicle are the same.
- - - - - - - WoodItem (M)	Group element containing elements describing a WoodItem within a Transport Package and the length specification of the package
- - - - - - - - LengthSpecification	Length specification of the package.
- - - - - - - - - LengthCategory	Value and UOM of the length category.
- - - - - - - - - TotalNumberOfUnits	The total number of units.
- - - - ProductSummary	Group of elements to provide summary information on product level.
- - - ProductGroupSummary	Element to provide summary information on the first grouping level.

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4.5   Message summary

Data Item	Description
-DeliveryMessageWoodSummary	The DeliveryMessageWoodSummary contains summary information based on the line items contained in the DeliveryMessageWood document.
- -TotalNumberOfShipments (M)	Total number of shipments referred to in a delivery message.

5.   BUSINESS RULES

The following table lists the specific business rules that apply to Delivery Specification and Invoice Specification e.g. DeliveryMessageWood type DeliveryMessage and the DeliveryMessageWood type PackageSpecification.

Business Rules
There are five types of delivery messages: LoadingOrder, PackageSpecification, DeliveryMessage, ShipmentAdvice and InitialShipmentAdvice.
The only two in use today is DeliveryMessage and PackageSpecification, since the other ones are covered by original PapiNet logistic messages.
A DeliveryMessageWood contains a reference to one or more Order(s) and one or more OrderLineItem(s) of those Order(s). (PurchaseOrder/OrderConfirmation)
Each DeliveryMessageLineItem refers to only one OrderLineItem
Each DeliveryMessageLineItem can contain one or more TransportPackageInformation elements.
TransportPackageInformation enumerates delivered physical packages.
TransportPackageInformation is a hierarchy that represents package details. Each level has an identifier field used to specify the package.
In the case of a mixed pallet with multiple products from different PurchaseOrderLineItem(s), the same pallet identifier can be included in multiple DeliveryMessageLineItem(s).
Each DeliveryLeg may include transport information that details the mode, vehicle, unit, and loading information.
Delivery messages must be processed in ascending date time order using DeliveryMessageDate to ensure the correct processing of replacements and/or cancellations.
If the seller sets the DeliveryMessageStatusType attribute to Replaced or Cancelled, the OriginalDeliveryNumber must be present in DeliveryMessageReference.

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6. REVISION HISTORY OF THIS DOCUMENT

Date	Change
30.09.2008	Document version 1.0, for V2.31
10.12.2009	Updated/PPesonen

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