



## **PapiNet WoodX implementation guide**

### **InvoiceWood**

MessageType: Invoice

**InvoiceWood V2.31**

2009-12-10

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## 1. INTRODUCTION

### 1.1 Purpose of this document

PapiNet WoodX is a segment implementation group (SIG) 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 *InvoiceWood Type Invoice*. 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 a 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. 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. PurchaseOrderWood	1. PurchaseOrder
	2. OrderConfirmationWood	2. StandardOrder
	3. DeliveryMessageWood	3. DeliveryMessage
	4. InvoiceWood	4. Invoice CreditNote/DebetNote
	5. DeliveryMessageWood	5. PackageSpecification

## 2. USE CASES OF INVOICE

The invoice is a list of the goods shipped and their quantities or services rendered, price of the merchandise or service, terms of sale, supplemental charges and allowances. Finally it communicates the payment required.

Typically a seller sends an invoice to a buyer after delivering products or services.

Sellers can use invoices described in this standard to:

### **Use case 1; Regular invoice**

The seller claims payment from the buyer for goods/services supplied.

### **Use case 2; Pre payment**

The seller requests payment in advance of the delivery. This might be the case with new buyers or buyers with bad credit history.

### **Use case 3; Proforma**

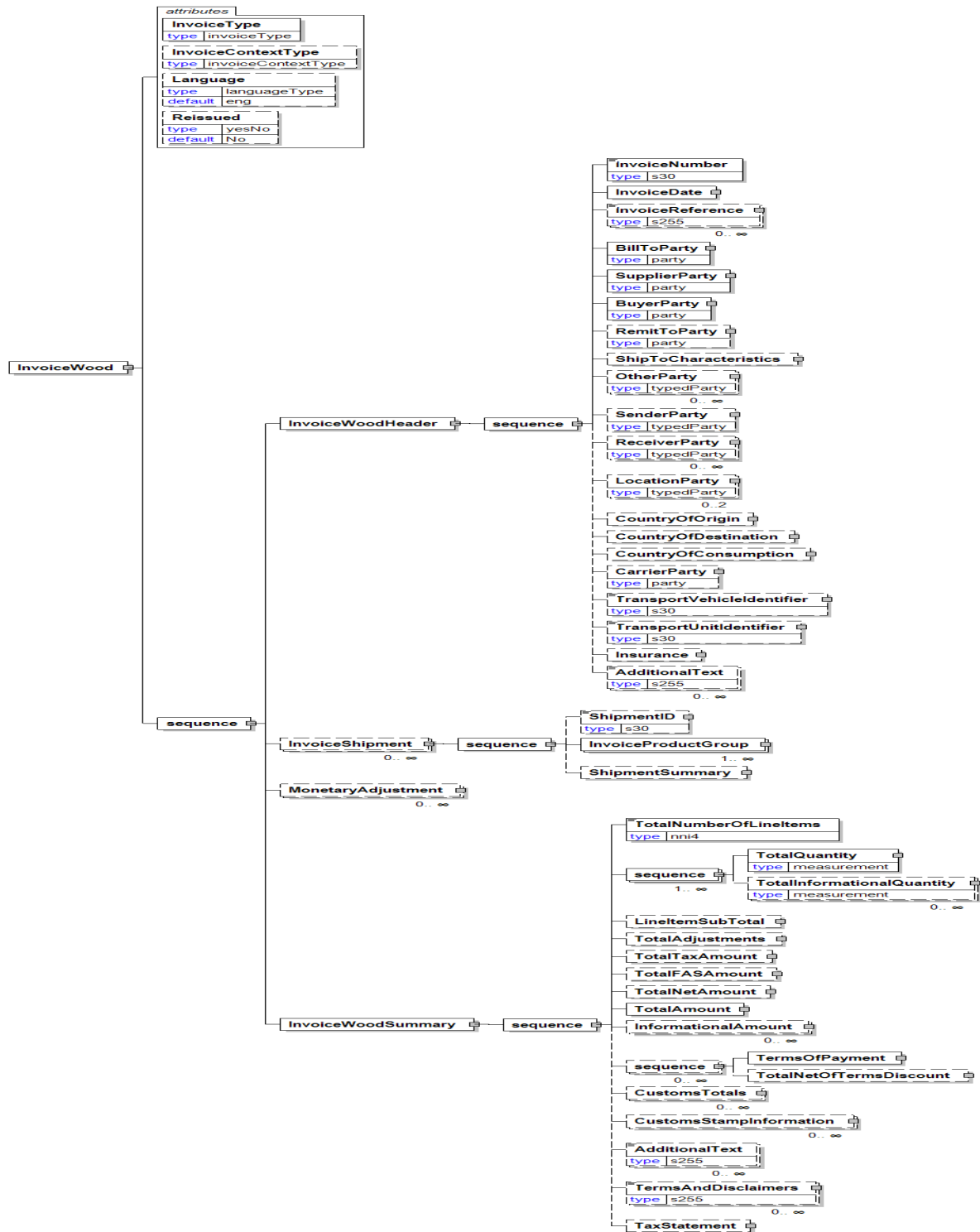
This is an invoice that provides information without claiming payment and is usually sent to a third party, i.e. customs.

Note: We have so far done no use cases of the message types CreditNote/DebetNote.

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### 3. OVERVIEW OF INVOICEWOOD MESSAGE STRUCTURE

The figure below describes the InvoiceWood-message structure



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## 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 InvoiceWood -message look at the related ISS excel documentation called implementation subset spreadsheet for InvoiceWood.

The Invoice message has been checked against the EU Directive of November 17, 2000 regarding the electronic invoice, the 650-2000 Proposal. It's a "Proposal for a Council Directive amending Directive 77/388/EEC with a view to simplifying, modernizing, and harmonizing the conditions laid down for invoicing in respect of value added tax".

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
<b>InvoiceWood</b>	The root. This element contains the entirety of the InvoiceWood message.
- InvoiceType (M)	Defines the various types of invoices.

### 4.3 Header

Data Item	Description
- InvoiceWoodHeader (M)	This element contains the information that is consistent for the entire InvoiceWood document.
- - InvoiceNumber (M)	The identification number of the invoice, generated by the seller.
- - InvoiceDate (M)	The date the invoice is issued by the supplier. This date often drives payment terms.
- - InvoiceReference	Identifies the relevant references pertaining to the delivery message defined by InvoiceReferenceType and AssignedBy.
- - BillToParty (M)	The address where the invoice is to be sent.
- - - PartyIdentifier	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

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Data Item	Description
	or business entity.
-- SupplierParty (M)	The organisation or business entity responsible for providing the product.
-- BuyerParty (M)	The legal entity to which the product is sold. Also commonly referred to as the sold-to party or customer.
-- RemitToParty	A group item containing details of the party to whom payment will be made.
-- ShipToCharacteristics	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.
-- OtherParty	An organisation or business entity other than those specifically detailed within a business document.
-- SenderParty	The business entity issuing the business document, the source of the document.
-- ReceiverParty	The business entity for whom the business document is intended, the destination of the document..
-- CountryOfOrigin	The country of origin for the material.
-- CountryOfDestination	The country where the goods will be, or were, shipped to.
-- CountryOfConsumption	The country of consumption for the material.
-- TransportVehicleIdentifier	The identifier of the transport vehicle (license plate number, voyage number, or vessel name). TransportVehicleIdentifier contains the TransportVehicleIdentifierType attribute.
--- TransportVehicleIdentifierType	Provides a contextual definition for the value used to identify the transport vehicle.
-- Insurance	Group element containing information about insurance.
-- AdditionalText	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.

## 4.4 Shipment

Data Item	Description
- InvoiceShipment	Shipment grouping for invoiced items.
-- InvoiceProductGroup (M)	Product grouping for invoiced items.
--- ProductGroupID	Possibility to group packages or Shipments. Example: Creating temporary group ID's for logistic reasons or lot number.
--- InvoiceWoodLineItem (M)	Specific information for a given item on an Invoice.
---- InvoiceLineNumber (M)	The sequential number that uniquely identifies the invoice line



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Data Item	Description
	item. It may enable the invoice to be printed, viewed, or discussed in a common order.
- - - - PurchaseOrderInformation	A group item containing information unique to the purchase order, which is provided by the buyer. PurchaseOrderInformation can be optional in the supply chain.
- - - - - PurchaseOrderNumber (M)	The unique order identifier as designated by the customer.
- - - - EndsDiscountInformation	Rule for calculating the ends discount, expressed by a code.
- - - - Product	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	An element used to communicate a human readable description of the product in the language specified by the Language attribute.
- - - - 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 used, 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/actual value. It is at this level that the unit of measure is specified.
- - - - InvoiceLineBaseAmount Information	A group item containing the price per unit and the invoice price amount subtotal.
- - - - - PriceDetails (M)	An element that groups together price information.
- - - - - PriceQuantityBasis (M)	The basis for the determination of the price.
- - - - - PricePerUnit (M)	PricePerUnit is an element designed to support flexibility in price representation.
- - - - - InvoiceLineBaseAmount	A field that contains the result of the calculation Quantity at the InvoiceLineItem level times the PricePerUnit. As such it does not include any taxes. It appears at the invoice line item level. InvoiceLineBaseAmount encapsulates CurrencyValue.
- - - - Monetary adjustment	Sema structure as under 4.5, but on line level
- - - - InvoiceLineAmount (M)	The total invoice amount per line (includes adjustments and tax). InvoiceLineAmount encapsulates CurrencyValue.
- - - - InvoiceReference	A group item detailing relevant references pertaining to the invoice message. InvoiceReferenceType describes the content.
- - - - 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 Type (M)	The type of safety and environmental information being communicated. Defines any additional information relating to safety and/or environmental matters.
- - - - - SafetyAnd EnvironmentalCertification	Safety and Environmental Certification

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Data Item	Description
- - - - AdditionalText	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..
- - - - DeliveryDateWindow	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.

## 4.5 Monetary adjustment

Data Item	Description
- MonetaryAdjustment	The element containing the information necessary for the understanding, calculation, and treatment of an adjustment to a currency amount. MonetaryAdjustment contains an attribute that indicates the type of adjustment being communicated.
- - AdjustmentType (M)	Describes the type of adjustment applied to a monetary oriented element. Adjustments values should always be given as negative or positive adjustments even if AdjustmentType indicates the sign. For example, a rebate of 1% on an invoice should be given as an adjustment percentage of -1%.
- - MonetaryAdjustmentLine (M)	A sequence number indicating the order of printing or the sequence in which a group of adjustments are to be considered.
- - MonetaryAdjustmentStartAmount	The beginning quantity used in the calculation of a monetary adjustment.
- - - PriceAdjustment	A group item defining a deviation from the PricePerUnit.
- - - FlatAmountAdjustment	A group item that contains flat adjustment amount information.
- - - TaxAdjustment	This content element contains the necessary information to describe, calculate, and handle a tax adjustment.
- - - - TaxType (M)	Refer to the main item definition for any enumerations.
- - - - TaxLocation (M)	The location used to determine the tax. Can be a country, state, province, or city. Depends on the tax type and on buyer or ship-to location.
- - InformationalAmount	A monetary amount used for information purposes only (not for calculation). For example, the invoice price adjustment subtotal is expressed in sterling pounds, and the buyer wants this information expressed in U.S. dollars.
- - MonetaryAdjustmentAmount	The actual amount of the monetary adjustment..

## 4.6 Message summary

Data Item	Description
- InvoiceWoodSummary (M)	Summary information that applies to all items on a Invoice.
- - TotalNumberOfLineItems (M)	The total number of individual line items in the document.
- - - TotalQuantity (M)	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.

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Data Item	Description
- - - TotalInformationalQuantity	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..
- - LineItemSubTotal	The total amount of all message InvoiceLineBaseAmount(s) line items without any monetary adjustments that may occur after the message line items.
- - TotalAdjustments	The CurrencyValue of TotalAdjustments contains the total of all MonetaryAdjustmentAmount for all instances of PriceAdjustment and FlatAmountAdjustment in the document ( <b>it excludes TaxAdjustments</b> ).
- - TotalTaxAmount	The CurrencyValue of TotalTaxAmount contains the sum of all instances of TaxAdjustment in the document. TotalTaxAmount contains the sum of all instances of the MonetaryAdjustmentAmount for tax adjustments.
- - TotalFASAmount	TotalFASAmount is the total Free Alongside Ship value.
- - TotalNetAmount	A field containing total amount excluding tax.
- - TotalAmount (M)	A field containing the total amount including tax.
- - InformationalAmount	A monetary amount used for information purposes only (not for calculation).
- - - TermsOfPayment (M)	A group item that contains agreed-to terms defining when, how, and under what conditions the payment is to be made.
- - - - TermsBasisDateType (M)	Indicates what date is being used as the terms basis.
- - - - TermsBasisDate (M)	The date and time of which the terms of payment calculations are based.
- - - - TermsDescription (M)	A textual description of the terms of payment.
- - - - TermsDiscountPercent	The percentage taken away from the invoice line items; a result of the terms of payment.
- - - - TermsDiscountDueDate (M)	The latest Date and Time on which the terms discount is still applicable, ie.due date.
- - - - TermsNetDueDate (M)	The latest Date and Time on which the full invoice amount is due on the seller's account without a discount applied, ie. the due date for the Invoice.
- - - - TermsInterestPenaltyPercent	The penalty associated with not meeting the terms discount parameters.
- - - TotalNetOfTermsDiscount	The components of the amount to be paid if payment terms are met, including the amount that is subject to the payment terms discount, the discount amount, and the net amount due.
- - - - AmountSubjectTo TermsDiscount (M)	The amount against which prompt payment terms can be applied.
- - - - TotalTermsDiscountNetAmount (M)	The total prompt payment discount amount excluding taxes.
- - - - TotalTermsDiscount AmountDue (M)	The total amount due after prompt payment discount, includes the related taxes.
- - - - InformationalAmount	A monetary amount used for information purposes only (not for calculation). For example, the invoice price adjustment subtotal is expressed in sterling pounds, and the buyer wants this information expressed in U.S. dollars.
- - - CustomsTariffCode	
- - - TotalQuantity	The quantity is given in TotalQuantity and in InformationalQuantity fields, defined with UOM.
- - AdditionalText	A text field that is used to communicate information not

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Data Item	Description
	previously defined or for special instructions. To be used only for circumstances not covered by specific elements.
- - TaxStatement	A group element for declaration of exception from normal charges of tax and the reason for tax exemption.

## 5. BUSINESS RULES

The following table lists the specific business rules that apply to InvoiceWood type Invoice.

Business Rules
If an invoice is to be changed the whole invoice is credited and a new invoice is issued.
Invoice cancellations are handled using credit notes.
At least one instance of either the Product or ChargeOrAllowance elements is required.
An Invoice message can refer to one or more orders. Note: Some buying parties will require that an Invoice refer to a single order. This is an implementation decision fully supported by the message structure.
An Invoice message can refer to one or more order line item(s).
An Invoice message can refer to one or many ship-to parties.
An Invoice message can refer to zero or more deliveries. An Invoice that does not refer to a delivery is typically a proforma or prepayment invoice, or for a service supplied by the seller.
The seller handles monetary adjustments to a grouping of invoice lines using MonetaryAdjustment on the root level of the invoice.

### Following rules apply in addition to the general rules.

#### Regular Invoice:

Business Rules
The seller handles adjustments to a grouping of invoice lines using the Summary portion of the invoice with multiple total quantities.
The InvoiceWoodHeader includes TermsOfPayment. When there are multiple payment terms for the deliveries being invoiced, the seller needs to generate multiple invoices.
An Invoice may contain transport details.

#### Duplicate Invoice:

Business Rules
A duplicate invoice introduces no new information. If the buyer finds the original copy of the invoice and

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Business Rules
processes it instead of the duplicate invoice, no confusion will result.

## 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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