



Specification

OEX OFML Business Data Exchange (OFML Part VII)

ORDERS

Order

Version 2.3.0

English

Editors:

Markus Behrschmidt, Vitra Services GmbH
Thomas Gerth, EasternGraphics GmbH

1.7.2015



Contents

1	Introduction.....	3
1.1	Using this Specification.....	3
1.2	Validation Methods	3
1.3	Filename Convention.....	3
1.4	Transmission Method	4
2	Structure.....	5
2.1	Overview of Document Structure.....	5
2.2	Legend.....	6
2.3	XML Declaration (mandatory).....	7
2.4	Frame element <code>oexDocFrame</code> – OEX document frame.....	8
2.5	Frame element <code>oexApplication</code> – Application, creating the document.....	8
2.6	Frame element <code>oexFile</code> – File of documents	8
2.7	Frame element <code>oexDocument</code> – Single document	9
2.8	Frame element <code>docHeader</code> – Document header.....	9
2.9	Frame element <code>hdrDocNo</code> – Header: Document numbers.....	10
2.10	Frame element <code>hdrDateTime</code> – Header: Date and time details.....	11
2.11	Frame element <code>hdrOrgData</code> – Header: Organizational data	11
2.12	Frame element <code>hdrAddress</code> – Header: Addresses.....	11
2.13	Frame element <code>hdrCom</code> – Header: Communication	12
2.14	Frame element <code>hdrContact</code> – Header: Contacts	12
2.15	Frame element <code>hdrText</code> – Header: Texts	13
2.16	Frame element <code>hdrReference</code> – Header: References.....	13
2.17	Frame element <code>hdrPricing</code> – Header: Pricing.....	13
2.18	Frame element <code>hdrPayment</code> – Header: Terms of payment.....	14
2.19	Frame element <code>docItem</code> – Document item.....	15
2.20	Frame element <code>itmConfiguration</code> – Item: Configuration details.....	16
2.21	Frame element <code>itmConfigText</code> – Item: Configuration texts.....	16
2.22	Frame element <code>itmDocNo</code> – Item: Document numbers	17
2.23	Frame element <code>itmDateTime</code> – Item: Date and time details.....	17
2.24	Frame element <code>itmOrgData</code> – Item: Organizational data	17

2.25	Frame element itmAddress – Item: Addresses	18
2.26	Frame element itmCom – Item: Communication	18
2.27	Frame element itmContact – Item: Contacts	19
2.28	Frame element itmText – Item: Texts	19
2.29	Frame element itmReference – Item: References.....	19
2.30	Frame element itmPricing – Item: Pricing	20
3	Definitions	22
3.1	Document-type related Specifications	22
3.1.1	Version Rules	22
3.1.2	Recurrence, mandatory and key Elements	22
3.1.3	Derived Element Types	22
3.2	Global Specification	22
3.2.1	OEX - GLOBAL	22
4	Appendix	23
4.1	History of Modification	23

1 Introduction

Specification for an electronic transmission of an (purchase) order.

Data format: XML (Extensible Markup Language)

Data definition: XML Schema (XS)

General information about the order is to be found under 2.7 Frame element `oexDocument` – Single document

Further applicable specifications (in the respectively valid version, see 3.2):

OEX-GLOBAL – Global (overall document types) specification

Related document types/specifications:

Request (OEX-REQOTE), quotation (OEX-QUOTES), order confirmation (OEX-ORDRSP), order Change (OEX-ORDCHG), dispatch advice (OEX-DESADV) and invoice (OEX-INVOIC).

1.1 Using this Specification

This specification describes especially the structure and elements for the document type “ORDERS - order“. Global structures and elements being also used for other document types are described in detail in the global specification “OEX-GLOBAL“ of the corresponding version. Only structures and elements that are derived from “OEX-GLOBAL“ and which are document-type specific are described in this specification (see also 2.2, 3.1.2 and 3.1.3)

1.2 Validation Methods

If appropriate XML parsers are used, the respectively valid XML schema (XS) can be applied to check an OEX-ORDERS document (see 2.3).

The schema is derived from the corresponding specifications and provided as master tool concerning element structure and data definition. Further checks of logical contents and dependencies as well as a mapping of the data are subject to the respectively used application.

1.3 Filename Convention

Filename convention for the document type “ORDERS“ is:

```
oex-orders_<sender-id>_jjjjmmtt-hhmmss.xml
```

The base of the filename consists of the document type as well as of date and time (24-hours format) of the file creation. The file extension is “xml“.

`<sender-id>` is the variable part of the filename which must be allocated by the sender of the file. Its maximum length is 20 digits. For instance, this could be a consecutive numeration of the sender or the number of the client or supplier.

Only digits, letters and hyphens are permitted.

In case of failure it is also possible to draw a conclusion with these details in the file type, its sender and the date when it was created.

Examples: `oex-orders_VI00025030_20051025-110842.xml`
`oex-orders_ABC-9564154_20050809-213306.xml`

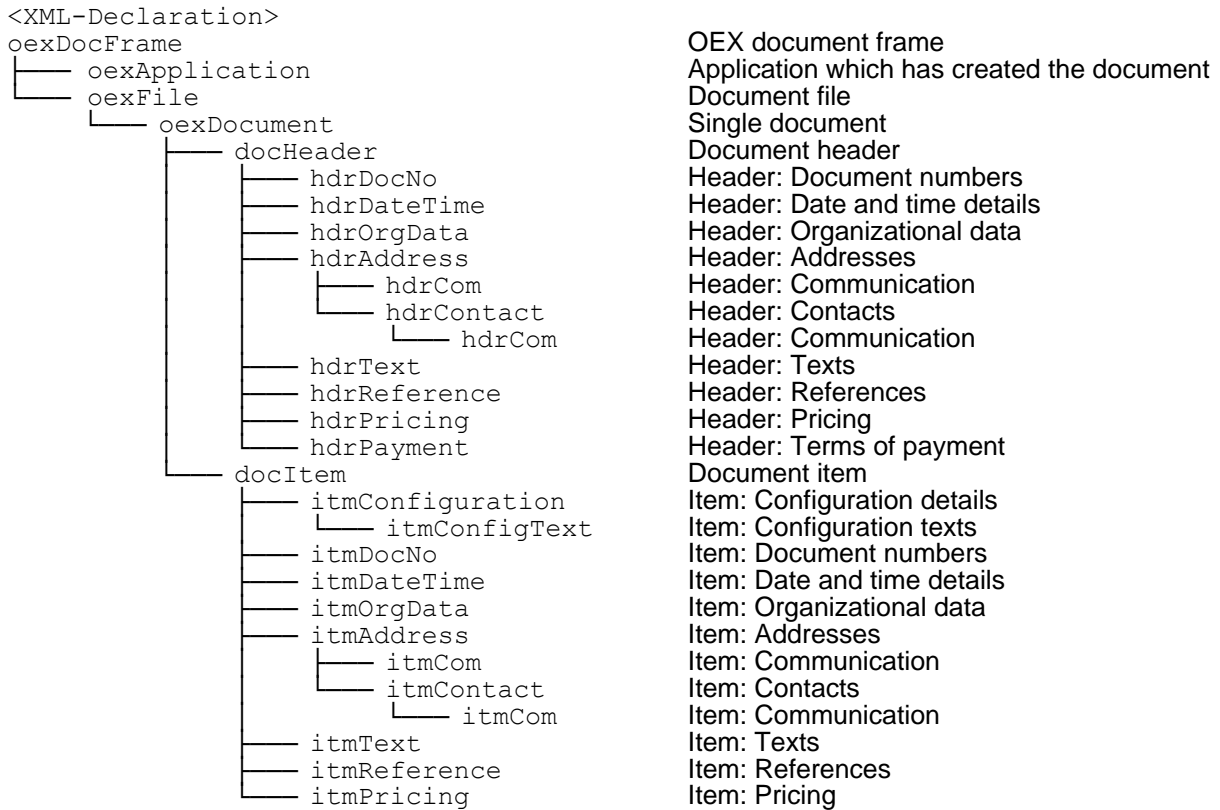
1.4 Transmission Method

The XML-file exchange is operated by e-mail attachment between agreed e-mail addresses of both partners. Permitted: several OEX files or also other attachments like for instance PDF files which are listed by the element type `Reference` (References) and the reference type `ATT` (Attachment) of the concerning OEX-document (see 2.16 and 2.29).

2 Structure

2.1 Overview of Document Structure

Structure of the frame elements



2.2 Legend

Explanation of specific columns used in the tables in chapter 2 "Structure".

Column	Description	Values	Meaning
Rec	Recurrence	1	Element appears exactly once
		#+	Element has to appear minimum # times or more. „#“ is a placeholder for any number. (Example: 1+ = „must“ 1 time, „can“ several times)
		#*	Element can appear one or several times, up to maximum # times. „#“ is a placeholder for any number. (Ex.: 3* = 1 to 3 times)
		*	Element appears 1 to several times
M. Mandat.	Mandatory element	<empty>	Element may be available. If it is available it must contain a value.
		X	Element must be available and contain a value.
		#	Element may be available. If it is available it must contain a value. The placeholder # stands for a consecutive number, starting with 1 for sub elements within a frame element which are mutually dependent and, in general, have to be indicated in combination. (e.g. quantity and quantity unit)
Key	Key element	!	Element must be available and contain a value. In addition, the element with its value and if the case may be, with the specifically indicated mandatory attributes must be well-defined in the case of repetitions within a frame element. If several elements are indicated that way they form a unique value (effect as in the case of a primary key).
Mod	Modification	<empty>	Element is document-related and/or refers to the indicated type of the global specification. (global type)
		D	Element derives from the indicated type of the global specification and is adapted to the related document. (derived type)

2.3 XML Declaration (mandatory)

XML Version and Code Page

```
<?xml version="1.0" encoding="UTF-8"?>
```

UTF-8 (Unicode Transformation Format) is used as standard code page.

Both partners can alternatively agree on following code pages for their data transmission:
ISO-8859-1 (International Standardization Organization) – Latin-1: i.a. West-European code page
ISO-8859-2 (International Standardization Organization) – Latin-2: i.a. Middle-European code page

These statements are placed to the beginning of a XML document.

XML Scheme (XS) Integration

The structure and data types of the XML-file are defined and verified by the following XML schemes. Major, Minor and Build represent the respective version number.

<code>oex-orders_<Major>.<Minor>.<Build>.xsd</code>	document-type related schema
<code>oex-global_<Major>.<Minor>.<Build>.xsd</code>	global schema

The integration of the document-type related schema is effected by attributes defined for XML schemes within the frame element `oexDocFrame`:

```
<oexDocFrame aMajor="2"  
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="oex-orders_<Major>.<Minor>.<Build>.xsd">
```

The integration of the global schema is already defined in the document-type related schema.

Valid Version of the XML Schemas

To this specification, the document-type related schema in version **2.3.0** (**oex-orders_2.3.0.xsd**) applies, or in case of modification of the schema without effecting this specification, the schema with the highest build number (see also 3.1.1).

2.4 Frame element oexDocFrame – OEX document frame

Element	Type	Rec	M.	Key	Mod	Description
oexDocFrame	DocFrame	1	X			OEX document frame

Subelement	Type	Rec	M.	Key	Mod	Description
oexApplication	Applic	1	X			Application which has created the document
oexFile	File	1	X			File of documents

2.5 Frame element oexApplication – Application, creating the document

Element	Type	Rec	M.	Key	Mod	Description
oexApplication	Applic	1	X			Application which has created the document

Subelement	Type	Rec	M.	Key	Mod	Description
vAppName	Value	1	X			Name of application
eAppVersion	AppVersion	1	X			Version of application

2.6 Frame element oexFile – File of documents

Element	Type	Rec	M.	Key	Mod	Description
oexFile	File	1	X			File of documents

Subelement	Type	Rec	M.	Key	Mod	Description
vDocumentType	DocumentType	1	X		D	Type of document
	Attribute					
	aMajor		X			Major version number
	aMinor		X			Minor version number
	aBuild		X			Build version number
	Table of values					D
	ORDERS					Order
oexDocument	Document	1+	X		D	Single document

2.7 Frame element oexDocument – Single document

Element	Type	Rec	M.	Key	Mod	Description
oexDocument	Document	1+	X	!	D	Single Document <i>(regarding the type of document)</i>
	Attribute				D	
	aDocNo		X	!		Consecutive number of the document
	aItemCount		X			Total number of items within document <i>(docItem)</i>
	aAction				D	Action <i>For ORDERS generally "C" is assumed for "Create".</i>

Subelement	Type	Rec	M.	Key	Mod	Description
docHeader	Header	1	X		D	Document header
docItem	Item	1+	X		D	Document item

This frame element contains all further elements that are used to describe an electronic (purchase) order.

In turn, order changes are transmitted via the document type ORDCHG.

An order ORDERS is followed by an order confirmation ORDRSP.

Details on the order are given from the point of view of the purchaser, not of the view of a possibly involved end-customer, on whose behalf the order is placed.

2.8 Frame element docHeader – Document header

Element	Type	Rec	M.	Key	Mod	Description
docHeader	Header	1	X		D	Document header
	Attribute				D	
	aAction				D	Action <i>For ORDERS generally "C" is assumed for "Create".</i>

Subelement	Type	Rec	M.	Key	Mod	Description
vOrderNumber	OrderNumber	1	X			Order number <i>Unique number of the purchase order from the purchaser.</i>
vClientNumber	Value	1	X			Client number <i>Number, which is used by the vendor (supplier) for his client.</i>
vClientID	ClientID	*				Client ID
vClientClass	ClientClass	*				Client classification
vVendorNumber	Value	1	X			Vendor (supplier) number <i>Number, which is used by the purchaser (client) for his vendor.</i>
vSupplierID	SupplierID	*				Supplier ID
vSupplierClass	SupplierClass	*				Supplier classification
vDocCurrency	DocCurrency	1	X			Currency of document
vIncoTerm	IncoTerm	1	1			Inco Terms (terms of delivery) <i>Different terms of delivery can be specified within the header text "Delivery conditions".</i>
vIncoTermLocation	IncoTermLoc	1	1			Location concerning Inco Terms
vPartialDelivery	PartDelivery	1	X			Allow partial deliveries?

Subelement	Type	Rec	M.	Key	Mod	Description
vDocLanguage	DocLanguage	1	X			Language of document
vOrderType	OrderType	1				Type of order
vGrossWeight	GrossWeight	1	2			Gross weight (total)
vNetWeight	NetWeight	1	2			Net weight (total)
vUnitWeight	UnitWeight	1	2			Weight unit
vVolume	Volume	1	3			Volume (total)
vUnitVolume	UnitVolume	1	3			Volume unit
hdrDocNo	DocNo	*			D	Header: Document numbers
hdrDateTime	DateTime	1+	X			Header: Date and time details
hdrOrgData	OrgData	*				Header: Organizational data
hdrAddress	Address	*				Header: Addresses
hdrText	Text	*				Header: Texts
hdrReference	Reference	*				Header: References
hdrPricing	Pricing	*			D	Header: Pricing
hdrPayment	Payment	3*				Header: Terms of payment

The document header contains all important references of the document.

Explanation of mandatory details:

- 1 The location for Inco Terms has to be specified as soon as the delivery term requires it.
- 2 The weight unit has to be specified as soon as the gross weight and/or the net weight are specified.
- 3 The volume unit has to be specified as soon as the volume is specified.

2.9 Frame element `hdrDocNo` – Header: Document numbers

Element	Type	Rec	M.	Key	Mod	Description
hdrDocNo	DocNo	*			D	Header: Document numbers

Subelement	Type	Rec	M.	Key	Mod	Description
vDocNoType	DocNoType	1	X			Type of document number
vDocNo	DocNo	1	X			Document number

This frame element contains the document numbers of the previous documents in the sequence of the business case and/or additional documents as a reference to the order. The indication of the document item is omitted on header level. Therefore, on header level, references to items of other documents are not provided. Referencing is made on item level (`itmDocNo`) by specifying the document item.

The indication of the order number itself is not permitted because it is unique for the document and specified in the frame element document header (`docHeader`) in the element (`vOrderNumber`).

Mandatory details, if existing and unique (not from different documents):

Request number (if the request refers to the entire order)

```
<vDocNoType aDocContext="S">REQ</vDocNoType>
```

Quotation number (if the quotation refers to the entire order)

```
<vDocNoType aDocContext="S">QUO</vDocNoType>
```

2.10 Frame element `hdrDateTime` – Header: Date and time details

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrDateTime</code>	<code>DateTime</code>	1+	X	!		Header: Date and time details

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vDateTimeType</code>	<code>DateTimeType</code>	1	X	!		Type of date/time
<code>vTimeZone</code>	<code>TimeZone</code>	1	X			Time zone
<code>vDateValue</code>	<code>Date</code>	1	X			Date
<code>vTimeValue</code>	<code>Time</code>	1				Time

This frame element is used to transfer date and time details of the order header.

At least the document date (`DOC`) must be specified.

Furthermore a requested delivery date (`CRD`) and the order date (`ORD`) can be specified for instance.

2.11 Frame element `hdrOrgData` – Header: Organizational data

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrOrgData</code>	<code>OrgData</code>	*		!		Header: Organizational data

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vOrgDataType</code>	<code>OrgDataType</code>	1	X	!		Type of organizational data
<code>vOrgDataValue</code>	<code>Value</code>	1	X			Value of organizational data

Example of usage: `Commission details (COM)` `"Commission Smith"`

2.12 Frame element `hdrAddress` – Header: Addresses

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrAddress</code>	<code>Address</code>	*		!		Header: Addresses

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vAddressType</code>	<code>AddressType</code>	1	X	!		Type of address
<code>vAddressNumber</code>	<code>Value</code>	1				Address number
<code>vAddressID</code>	<code>AddressID</code>	*				Address ID
<code>vTitle</code>	<code>Value</code>	1				Title
<code>vName1</code>	<code>Name1</code>	1	X			Name 1
<code>vName2</code>	<code>Name2</code>	1				Name 2
<code>vName3</code>	<code>Name3</code>	1				Name 3
<code>vName4</code>	<code>Name4</code>	1				Name 4
<code>vStreet</code>	<code>Street</code>	1	X			Street
<code>vStreetNo</code>	<code>Value</code>	1				Street number
<code>vStreet2</code>	<code>Street2</code>	1				Street 2
<code>vCountryCode</code>	<code>CountryCode</code>	1	X			Country code
<code>vPostalCode</code>	<code>PostalCode</code>	1	X			Postal code
<code>vLocation</code>	<code>Location</code>	1	X			Location (city)
<code>vDistrict</code>	<code>District</code>	1				District
<code>vCountyCode</code>	<code>CountyCode</code>	1				County/district/state
<code>vPostalCodePOBox</code>	<code>PostalCodePOB</code>	1				Postal code of P.O. Box

Subelement	Type	Rec	M.	Key	Mod	Description
vPOBox	Value	1				P.O. Box (post-office box)
vTaxCode	Value	1				Tax number at tax office/authorities
vTaxCodeEU	Value	1				Sales tax identification number (EU)
vTaxCodeUSA	Value	1				Sales tax code USA / Jurisdiction
hdrCom	Com	*				Header: Communication
hdrContact	Contact	*				Header: Contacts

If no ship-to party address (SH) is specified, the address of the sold-to party (SO) or the address of the master data of the supplier is used.

The business partner must define if the given shipping address is a differing shipping address that is possibly conditioned differently than the shipment address(es) agreed on. As indicators, e.g. the address number or the organization type TRZ transport zone can be used. The former would be defined by the master data, the latter by transport zones. (e.g. 1 = zone 1 means no freight costs; 2 = zone 2 means freight costs of 100,00 and will be reflected in the pricing Pricing etc.)

In general, especially the addresses of the sold-to party (SO) and the supplier (SU) are known by both business partners and saved as master data. They need not necessarily be transferred, they correspond to the customer number or supplier number of the document header (docHeader).

If applicable, the contact responsible for the order is transmitted with an address.

2.13 Frame element hdrCom – Header: Communication

Element	Type	Rec	M.	Key	Mod	Description
hdrCom	Com	*		!		Header: Communication

Subelement	Type	Rec	M.	Key	Mod	Description
vComType	ComType	1	X	!		Type of communication
	Attribute					
	aScopeInfo		X	!		Scope of information
vComValue	Value	1	X			Value of communication

For specifying a phone number, fax number, e-mail-address etc. appendant to the address and/or the contact.

2.14 Frame element hdrContact – Header: Contacts

Element	Type	Rec	M.	Key	Mod	Description
hdrContact	Contact	*				Header: Contacts

Subelement	Type	Rec	M.	Key	Mod	Description
vContactType	ContactType	1	X			Type of contact
vContactNumber	Value	1				Contact number
vTitle	Value	1				Title
vFirstName	FirstName	1				First name
vLastName	LastName	1	X			Last name
hdrCom	Com	*				Header: Communication

For specifying contacts that are required for processing the concerning business case or are organizationally assigned to it (e.g. one or more sales persons regarding commissions).

2.15 Frame element `hdrText` – Header: Texts

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrText</code>	Text	*		!		Header: Texts

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vTextType</code>	TextType	1	X	!		Type of text
<code>vTextLanguage</code>	TextLanguage	1	X	!		Language of text
<code>vTextContent</code>	TextContent	1+	X			Content of text

2.16 Frame element `hdrReference` – Header: References

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrReference</code>	Reference	*				Header: References

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vReferenceType</code>	ReferenceType	1	X			Type of reference
<code>vReferenceValue</code>	Value	1	X			Value of reference
<code>vReferenceDesc</code>	Value	1	X			Description of reference (<i>language of document</i>)

If attachments of an OEX document are sent in an e-mail, they have to be indicated accordingly. This enables the application to allocate different attachments to the corresponding OEX document and if necessary to process them.

Example of usage: Internet link (LNK) to a tracking system
 "<http://www.harrison-office.com/orderstatus.html?p=1213131>"

2.17 Frame element `hdrPricing` – Header: Pricing

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrPricing</code>	Pricing	*			D	Header: Pricing

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vConditionType</code>	ConditionType	1	X			Type of condition
<code>vConditionValue</code>	ConditionValue	1	X			Value of condition
<code>vConditionRate</code>	ConditionRate	1				Rate of condition
<code>vCondCurrency</code>	CondCurrency	1				Currency of condition
<code>vConditionText</code>	ConditionText	1				Description of condition (<i>language of document</i>)

In this frame element the net total (purchase) of the order items of an order is specified. This can be used as check-sum during processing of the document.

Other details as for instance discounts are optional, but can also be used as check during processing. Unless otherwise stated, the condition currency is pre-defined by the document currency.

Note: In contrast to the price details on order item level the sub elements for price unit and quantity unit in this frame element have been omitted, because here it's always about total (sum) conditions.

Example 1 – Specification of the net value of the order:

Net value of order item 1 is \$ 100,00

Net value of order item 2 is \$ 150,00

```
<hdrPricing aCondNo="1">
  <vConditionType aCondArea="P">TNET</vConditionType>
  <vConditionValue>250.00</vConditionValue>
  <vCondCurrency>USD</vCondCurrency>
</hdrPricing>
```

Example 2 – Specification of further order conditions as total of the order items:

Gross value of order item 1 is \$ 125,00

Discount rate of order item 1 is 20% as basic discount

Net value of order item 1 is \$ 100,00

Gross value of order item 2 is \$ 200,00

Discount rate of order item 2 is 25% as basic discount

Net value of order item 2 is \$ 150,00

```
<hdrPricing aCondNo="1">
  <vConditionType aCondArea="P">TGRO</vConditionType>
  <vConditionValue>325.00</vConditionValue>
  <vCondCurrency>USD</vCondCurrency>
</hdrPricing>
<hdrPricing aCondNo="2">
  <vConditionType aCondArea="P" aCondRef="1" aTypeDis="BD" aCondSign="-">DISI</vConditionType>
  <vConditionValue>75.00</vConditionValue>
  <vCondCurrency>USD</vCondCurrency>
  <vConditionText>Basic discount</vConditionText>
</hdrPricing>
<hdrPricing aCondNo="3">
  <vConditionType aCondArea="P">TNET</vConditionType>
  <vConditionValue>250.00</vConditionValue>
  <vCondCurrency>USD</vCondCurrency>
</hdrPricing>
```

The discounts are indicated as absolute total values resulting from the items with the same discount type (aTypeDis).

2.18 Frame element `hdrPayment` – Header: Terms of payment

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrPayment</code>	Payment	3*		!		Header: Terms of payment

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vPaymentPart</code>	PaymentPart	1	X	!		Part of payment term
<code>vPaymentRate</code>	PaymentRate	1	X			Discount rate (%)
<code>vPaymentDays</code>	PaymentDays	1	X			Number of days (payment target)

2.19 Frame element docItem – Document item

Element	Type	Rec	M.	Key	Mod	Description
docItem	Item	1+	X	!	D	Document item
	Attribute				D	
	aItemNo		X	!		Consecutive number of document item
	aAction				D	Action <i>For ORDERS generally "C" is assumed for "Create".</i>

Subelement	Type	Rec	M.	Key	Mod	Description
vOrderItemNumber	OrderItemNo	1	X			Order item number <i>Unique order item number (within the order).</i>
vOrderTopLevelNo	OrderTopLevel	1				Higher level order item number <i>Reference to higher level order item number, if sub order items or bill of materials (BOM) are used.</i>
vOrderComposNo	OrderComposNo	1	3			Number of order item of the composite article <i>This reference defines that the article automatically was created by the referenced composite article.</i>
vOrderSubArtId	CompSubArtId	1	3			Identification of the sub article <i>The ID is assigned by the composite article.</i>
vOrderAddStateCd	AddStateCode	1				Additional state information
vClientArticleNo	Value	1				Article number of client
vVendorArticleNo	VendorArtNo	1	X			Article number of vendor (supplier)
vVendorID	VendorID	1	X			Vendor ID
vVendorSeries	VendorSeries	1	X			Vendor Series
vCatalogId	CatalogId	1				Catalog ID
vArticleEAN	EAN_Article	1				EAN of article
vOrderQuantity	OrderQuantity	1	X			Order quantity
vOrderUnit	OrderUnit	1	X			Order unit
vGrossWeight	GrossWeight	1	1			Gross weight (total)
vNetWeight	NetWeight	1	1			Net weight (total)
vUnitWeight	UnitWeight	1	1			Weight unit
vVolume	Volume	1	2			Volume (total)
vUnitVolume	UnitVolume	1	2			Volume unit
vClassification	Classification	*				Class/category of order item
itmConfiguration	Config	*				Item: Configuration details
itmDocNo	DocNo	*				Item: Document numbers
itmDateTime	DateTime	*				Item: Date and time details
itmOrgData	OrgData	*				Item: Organizational data
itmAddress	Address	*				Item: Addresses
itmText	Text	1+	X			Item: Texts
itmReference	Reference	*				Item: References
itmPricing	Pricing	*				Item: Pricing

Basic data of order item.

Due to the interaction of the item number and the superior item number an „arbitrarily“ deep hierarchy structure can be displayed. But special structures by item number cannot be displayed this way - directory structures even less - because every application follows a logic of its own. Item number details, such as “100.A.10-1“, can be transmitted by the organization data POS. However, to which extent another application can process those, return them or even use them for itself, remains unsettled.

Explanation of mandatory details:

- 1 The **Weight unit** has to be specified as soon as the **Gross weight** and/or the **Net weight** are specified.
- 2 The **Volume unit** has to be specified as soon as the **Volume** is specified.
- 3 The **Identification of the sub article** can only be specified if the **Number of order item of the composite article** is specified.

2.20 Frame element itmConfiguration – Item: Configuration details

Element	Type	Rec	M.	Key	Mod	Description
itmConfiguration	Config	*				Item: Configuration details

Subelement	Type	Rec	M.	Key	Mod	Description
vClassID	Value	1				Class ID
vOptionID	Value	1	X			Option
vOptionEAN	EAN_Option	1				EAN of Option ID
vValueID	Value	1	X			Value ID
vValueEAN	EAN_Value	1				EAN of Value ID
itmConfigText	ConfigText	*				Item: Configuration texts

2.21 Frame element itmConfigText – Item: Configuration texts

Element	Type	Rec	M.	Key	Mod	Description
itmConfigText	ConfigText	*				Item: Configuration texts

Subelement	Type	Rec	M.	Key	Mod	Description
vTextLanguage	TextLanguage	1	X			Text language
vOptionText	OptionText	1	X			Option text
vValueText	ValueText	*				Value text Here, the text is skipped if it is a freely specifiable character value.

Note: Transmitting the texts (characters and values) can be omitted if it is not the original article of the vendor, because their contents cannot be changed. Deviating article descriptions are integrated in the modified article text (see vTextType = ARTM). Then the article has to be indicated as „Modified Article“ (vVendorArticleNo → aStatus = M).

2.22 Frame element itmDocNo – Item: Document numbers

Element	Type	Rec	M.	Key	Mod	Description
itmDocNo	DocNo	*				Item: Document numbers

Subelement	Type	Rec	M.	Key	Mod	Description
vDocNoType	DocNoType	1	X			Type of document number
vDocNo	DocNo	1	X			Document number
vDocLine	DocLine	1				Document item number

This frame element contains the document numbers of the previous documents in the sequence of the business case and/or additional documents as a reference to the order. The indication of the document item is always necessary except for documents without item details.

The indication of the order number itself is not permitted here, because it is unique for the document and is specified in the frame element document header (docHeader) in the element (vOrderNumber).

Mandatory details, if existing:

Request number

`<vDocNoType aDocContext="S">REQ</vDocNoType>`

Quotation number

`<vDocNoType aDocContext="S">QUO</vDocNoType>`

2.23 Frame element itmDateTime – Item: Date and time details

Element	Type	Rec	M.	Key	Mod	Description
itmDateTime	DateTime	*		!		Item: Date and time details

Subelement	Type	Rec	M.	Key	Mod	Description
vDateTimeType	DateTimeType	1	X	!		Type of date/time
vTimeZone	TimeZone	1	X			Time zone
vDateValue	Date	1	X			Date
vTimeValue	Time	1				Time

This frame element is only used, if its details differ from the data of the superior header frame element hdrDateTime or if it is containing additional information relevant for the document item.

2.24 Frame element itmOrgData – Item: Organizational data

Element	Type	Rec	M.	Key	Mod	Description
itmOrgData	OrgData	*		!		Item: Organizational data

Subelement	Type	Rec	M.	Key	Mod	Description
vOrgDataType	OrgDataType	1	X	!		Type of organizational data
vOrgDataValue	Value	1	X			Value of organizational data

This frame element is only used, if its details differ from the data of the superior header frame element hdrOrgData or if it is containing additional information relevant for the document item.

2.25 Frame element itmAddress – Item: Addresses

Element	Type	Rec	M.	Key	Mod	Description
itmAddress	Address	*		!		Item: Addresses

Subelement	Type	Rec	M.	Key	Mod	Description
vAddressType	AddressType	1	X	!		Type of address
vAddressNumber	Value	1				Address number
vAddressID	AddressID	*				Address ID
vTitle	Value	1				Title
vName1	Name1	1	X			Name 1
vName2	Name2	1				Name 2
vName3	Name3	1				Name 3
vName4	Name4	1				Name 4
vStreet	Street	1	X			Street
vStreetNo	Value	1				Street number
vStreet2	Street2	1				Street 2
vCountryCode	CountryCode	1	X			Country code
vPostalCode	PostalCode	1	X			Postal code
vLocation	Location	1	X			Location (city)
vDistrict	District	1				District
vCountyCode	CountyCode	1				County/district/state
vPostalCodePOBox	PostalCodePOB	1				Postal code of P.O. Box
vPOBox	Value	1				P.O. Box (post-office box)
vTaxCode	Value	1				Tax number at tax office/authorities
vTaxCodeEU	Value	1				Sales tax identification number (EU)
vTaxCodeUSA	Value	1				Sales tax code USA / Jurisdiction
itmCom	Com	*				Item: Communication
itmContact	Contact	*				Item: Contacts

This frame element is only used, if its details differ from the data of the superior header frame element `hdrAddress` or if it is containing additional information relevant for the document item.

2.26 Frame element itmCom – Item: Communication

Element	Type	Rec	M.	Key	Mod	Description
itmCom	Com	*		!		Item: Communication

Subelement	Type	Rec	M.	Key	Mod	Description
vComType	ComType	1	X	!		Type of communication
	Attribut					
	aScopeInfo		X	!		Scope of information
vComValue	Value	1	X			Value of communication

This frame element is only used, if its details differ from the data of the superior header frame element `hdrAddress` or if it is containing additional information relevant for the document item.

2.27 Frame element itmContact – Item: Contacts

Element	Type	Rec	M.	Key	Mod	Description
itmContact	Contact	*				Item: Contacts

Subelement	Type	Rec	M.	Key	Mod	Description
vContactType	ContactType	1	X			Type of contact
vContactNumber	Value	1				Contact number
vTitle	Value	1				Title
vFirstName	FirstName	1				First name
vLastName	LastName	1	X			Last name
itmCom	Com	*				Item: Communication

This frame element is only used, if its details differ from the data of the superior header frame element `hdrAddress` or if it is containing additional information relevant for the document item.

2.28 Frame element itmText – Item: Texts

Element	Type	Rec	M.	Key	Mod	Description
itmText	Text	1+	X	!		Item: Texts

Subelement	Type	Rec	M.	Key	Mod	Description
vTextType	TextType	1	X	!		Type of text
vTextLanguage	TextLanguage	1	X	!		Language of text
vTextContent	TextContent	1+	X			Content of text

At least the short text of a standard article must be specified. A long text can be omitted in this case. This is different for special articles (compare global OEX value type `VendorArtNo` → `aStatus`).

2.29 Frame element itmReference – Item: References

Element	Type	Rec	M.	Key	Mod	Description
itmReference	Reference	*				Item: References

Subelement	Type	Rec	M.	Key	Mod	Description
vReferenceType	ReferenceType	1	X			Type of Reference
vReferenceValue	Value	1	X			Value of Reference
vReferenceDesc	Value	1	X			Description of reference (language of document)

This frame element is only used, if its details differ from the data of the superior header frame element `hdrReference` or if it is containing additional information relevant for the document item.

2.30 Frame element itmPricing – Item: Pricing

Element	Type	Rec	M.	Key	Mod	Description
itmPricing	Pricing	*				Item: Pricing

Subelement	Type	Rec	M.	Key	Mod	Description
vConditionType	ConditionType	1	X			Type of condition
vConditionValue	ConditionValue	1	X			Value of condition
vConditionRate	ConditionRate	1				Rate of condition
vCondCurrency	CondCurrency	1				Currency of condition
vConditionText	ConditionText	1				Description of condition (language of document)
vPriceUnit	PriceUnit	1				Price unit
vMeasureUnit	MeasureUnit	1				Quantity unit

Specification of the net value (purchase) of the order item (TNET). This can be used as check-sum during processing of the document.

Other details as for instance discounts are optional, but can also be used as check during processing.

Unless otherwise stated, the condition currency is pre-defined by the document currency.

The quantity unit is provided by the order quantity unit (vOrderUnit) if not indicated differently.

Example 1 – Specification of the net value of the order item:

Net unit price of order item is \$ 50,00

Order quantity = 2

Order unit = C62

```
<itmPricing aCondNo="1">
  <vConditionType aCondArea="P">TNET</vConditionType>
  <vConditionValue>100.00</vConditionValue>      ! TNET = Order quantity x Net unit price
  <vCondCurrency>USD</vCondCurrency>
</itmPricing>
```

Example 2 – Specification of all conditions of the order item:

Gross unit price of order item is \$ 50,00 and tax code 1, 19%

Discount (as basic discount) of 20% from gross unit price

Discount (as showroom discount) of 5% from the already discounted price

Order quantity = 2

Order unit = C62

19% VAT

```
<itmPricing aCondNo="1">
  <vConditionType aCondArea="P">SGRO</vConditionType>
  <vConditionValue>50.00</vConditionValue>
  <vCondCurrency>USD</vCondCurrency>
  <vPriceUnit>1.000</vPriceUnit>
  <vMeasureUnit>C62</vMeasureUnit>
</itmPricing>
<itmPricing aCondNo="2">
  <vConditionType aCondArea="P" aCondRef="1" aTypeDis="BD" aCondSign="-">DISI</vConditionType>
  <vConditionValue>10.00</vConditionValue>
  <vConditionRate>20.00</vConditionRate>
  <vCondCurrency>USD</vCondCurrency>
  <vConditionText>Basic discount</vConditionText>
  <vPriceUnit>1.000</vPriceUnit>
  <vMeasureUnit>C62</vMeasureUnit>
</itmPricing>
<itmPricing aCondNo="3">
  <vConditionType aCondArea="P" aCondRef="2" aTypeDis="D1" aCondSign="-">DISI</vConditionType>
  <vConditionValue>2.00</vConditionValue>
  <vConditionRate>5.00</vConditionRate>
  <vCondCurrency>USD</vCondCurrency>
  <vConditionText>Showroom discount</vConditionText>
```

```

        <vPriceUnit>1.000</vPriceUnit>
        <vMeasureUnit>C62</vMeasureUnit>
    </itmPricing>
    <itmPricing aCondNo="4">
        <vConditionType aCondArea="P">SNET</vConditionType>
        <vConditionValue>38.00</vConditionValue>
        <vCondCurrency>USD</vCondCurrency>
        <vPriceUnit>1.000</vPriceUnit>
        <vMeasureUnit>C62</vMeasureUnit>
    </itmPricing>
    # Here, the order quantity of 2 pieces takes effect: TNET = SNET x 2
    <itmPricing aCondNo="5">
        <vConditionType aCondArea="P">TNET</vConditionType>
        <vConditionValue>76.00</vConditionValue>
        <vCondCurrency>USD</vCondCurrency>
    </itmPricing>
    <itmPricing aCondNo="6">
        <vConditionType aCondArea="P" aTaxCode="1">TTNE</vConditionType>
        <vConditionValue>76.00</vConditionValue>
        <vCondCurrency>USD</vCondCurrency>
    </itmPricing>
    <itmPricing aCondNo="7">
        <vConditionType aCondArea="P" aCondRef="6" aTaxCode="1">TTAX</vConditionType>
        <vConditionValue>14.44</vConditionValue>
        <vConditionRate>19.00</vConditionRate>
        <vCondCurrency>USD</vCondCurrency>
    </itmPricing>
    <itmPricing aCondNo="8">
        <vConditionType aCondArea="P">TOTL</vConditionType>
        <vConditionValue>90.44</vConditionValue>
        <vCondCurrency>USD</vCondCurrency>
    </itmPricing>

```

3 Definitions

3.1 Document-type related Specifications

Specification of the document "ORDERS" – Order (purchase order)

3.1.1 Version Rules

This specification is available as version 2.3.0:

Major 2.3.0

Minor 2.3.0

Build 2.3.0

Detailed explanations of the version rules can be found in the global specification (OEX-GLOBAL, see also 3.2)

3.1.2 Recurrence, mandatory and key Elements

Element features like recurrence, mandatory and key elements, can be set document-type related and do not implicate a derivation to the referred types or domains of the global specification (OEX-GLOBAL, see 1.1 and 2.2)

3.1.3 Derived Element Types

An element type is called "derived" if it restricts itself to certain values, attributes and / or sub elements in opposition to its global specification (OEX-GLOBAL, see 1.1 and 2.2)

3.2 Global Specification

3.2.1 OEX - GLOBAL

The global (applicable to all document-types) specifications can be found in the document OEX-GLOBAL in the respectively valid version 2.3.x. In which the „x“ stands for the highest Build version number.

4 Appendix

4.1 History of Modification

Version	Modification
2.3.0 – 1.7.2015	<ul style="list-style-type: none">▪ Global changes according to oex-global_2.3.0.pdf▪ Introduced new optional element <code>vClassification</code> in frame element 2.19 Document item <code>docItem</code> for universal specification of categories or classes.
2.2.0 – 11.10.2013	<ul style="list-style-type: none">▪ Global changes according to oex-global_2.2.0.pdf▪ Introduced new optional elements in frame element 2.8 Document header <code>docHeader</code> for client ID, client classification, supplier ID and supplier classification: <code>vClientID</code>, <code>vClientClass</code>, <code>vSupplierID</code> and <code>vSupplierClass</code>. (Elements <code>vClientILN</code> and <code>vVendorILN</code> were replaced by <code>vClientID</code> resp. <code>vSupplierID</code>).▪ Introduced new optional elements in frame elements 2.12 Header: Addresses <code>hdrAddress</code> and 2.25 Item: Addresses <code>itmAddress</code> for street 2 und district: <code>vStreet2</code> and <code>vDistrict</code>. (Element <code>vAddressILN</code> was replaced by <code>vAddressID</code>).▪ Introduced new optional elements in frame element 2.19 Document item <code>docItem</code> for catalog ID, identification of sub article and additional state information: <code>vCatalogId</code>, <code>vOrderSubArtId</code> and <code>vOrderAddStateCd</code>.
2.1.0 – 09.02.2010	Initial English version