



Specification

OEX
OFML Business Data Exchange
(OFML Part VII)

ORDCHG
Order Change

Version 3.0.0
English

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1 Introduction

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

Format of data: XML (Extensible Markup Language)

Data definition: XML Schema (XS)

For general information on the order change see frame element `oexDocument` (Single document).

Further applicable specifications (in the respectively valid version, see 2.1):

OEX-GLOBAL – Superior specification (document type independent)

Related document types/specifications:

Request (OEX-REQOTE), quotation (OEX-QUOTES), order (OEX-ORDERS), order confirmation (OEX-ORDRSP), despatch advice (OEX-DESADV) and invoice (OEX-INVOIC).

1.1 Using this specification

This specification describes especially the structure and elements for the document type “ORDCHG - order change“. Global structures and elements being also used for other document types are described in detail in the superior 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 1.7, 0 and 0).

1.2 Filename convention

Filename convention for the document type “ORDCHG“ is:

```
oex-ordchg_<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 creation of the file. 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-ordchg_K000085162_20061102-050954.xml`
`oex-ordchg_ABC-9564154_20061025-152417.xml`

1.3 Transmission method

The XML-file exchange is operated by email-attachment between agreed email-addresses of both partners. Permitted: several OEX files or also other attachments like for instance PDF files, which are then listed by the element type `Reference` (References) and the reference type `ATT` (Attachment) of the concerning OEX-document (see 3.14 and 3.30).

1.4 XML Declaration

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

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

```
<oexDocFrame aMajor="3"  
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
xsi:noNamespaceSchemaLocation="oex-ordchg_<Major>.<Minor>.<Build>.xsd">
```

The integration of the superior 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 3.0.0 `oex-ordchg_3.0.0.xsd` applies, or in case of modification of the schema without effecting this specification, the schema with the highest build number is (see also 0).

1.5 Validation methods

If appropriate XML parsers are used, the respectively valid XML schema (XS) can be applied to check an OEX-ORDCHG document (see 1.4).

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.

1.6 Completeness of the document

In principle, the document is transferred completely, i.e. also with document items (or data) containing no modifications with respect to the preceding reference document (`aAction = N`), see also frame element `oexDocument`.

1.7 Legend

Explanation of specific columns used in the tables in chapter "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 0 to several times, up to maximum # times, where „#“ is a placeholder for any number. If the element is a mandatory element, it must occur at least once. (Ex.: 3* = 1 to 3 times)
		*	Element can appear 0 to several times. If the element is a mandatory element, it must occur at least once.
M.	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 superior specification.
		D	Element derives from the indicated type of the superior specification and is adapted to the related document.

2 Definitions

2.1 Superior specification

The superior specifications (applicable to all document-types) can be found in the document OEX-GLOBAL in the respectively valid version 3.0.x. In which the „x“ refers to the highest build version number.

2.2 Document-type related specifications

Specification of the document “ORDCHG” – Order Change

Version rules

This specification is available as version 3.0.0:

Major	3.0.0
Minor	3.0.0
Build	3.0.0

Detailed explanations of the version rules can be found in the superior specification (OEX-GLOBAL).

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 superior specification (OEX-GLOBAL, see 1.1 and 1.7)

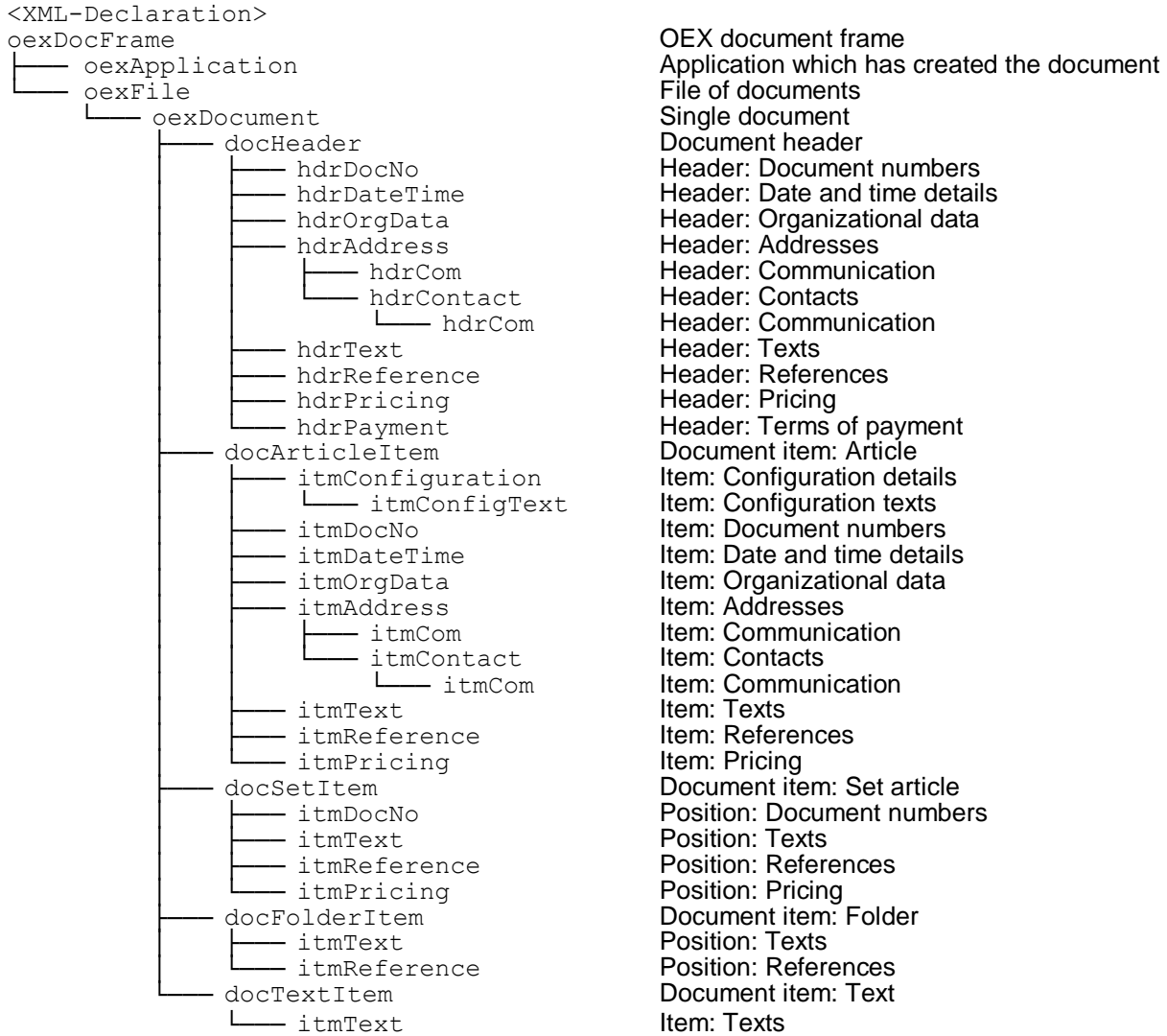
Derived element types

An element type is called “derived” if it restricts itself to certain values, attributes and / or sub elements in opposition to its superior specification (OEX-GLOBAL, see 1.1 and 1.7) .

3 Structure

3.1 Overview of the document structure

Structure of the frame elements



3.2 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

3.3 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

3.4 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
	ORDCHG					Order change
oexDocument	Document	1+	X		D	Single document

3.5 Frame element oexDocument – Single document

Element	Type	Rec	M.	Key	Mod	Description
oexDocument	Document	1+	X	!		Single Document <i>(regarding the type of document)</i>
	Attribute					
	aDocNo		X	!		Consecutive number of the document
	aItemCount		X			Total number of items within document
	aAction		X			Action

Subelement	Type	Rec	M.	Key	Mod	Description
docHeader	Header	1	X			Document header
docArticleItem	Item	1+	X		D	Document item: Article
docSetItem	Item	*			D	Document item: Set article
docFolderItem	Item	*			D	Document item: Folder
docTextItem	Item	*			D	Document item: Text

This frame element contains all further elements that are used to describe an electronic order change. Before the first order change an order (ORDERS) must be preceded. It is not necessary that the order has already been confirmed by the supplier (ORDRSP).

An order change normally results in an order confirmation (ORDRSP). Due to the chronology (processing and confirmation of the order or a change of the order by the supplier), an order confirmation always refers to the most recently received order change, i.e., always the most recent changes are confirmed.

The processing of the order change is operated and supported by the attribute aAction:

If a change has been made to at least one document item in comparison to the preceding document (reference document), value M must be specified for the attribute aAction. For the changed document items (doc*Item), the attribute has to be set accordingly. If there were no changes in the document items, value N must be specified for attribute aAction here and in all document items.

Details on the order change 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 change is placed.

3.6 Frame element docHeader – Document header

Element	Type	Rec	M.	Key	Mod	Description
docHeader	Header	1	X			Document header

Subelement	Type	Rec	M.	Key	Mod	Description
vOrderChangeNo	DocNo	1	X			Order change number <i>Unique number of the order change from the supplier.</i>
vPrecedingDocType	DocNoType	1	X		D	Type of (the number of) preceding document
	Table of values					
	ORD					Order number
	CHG					Order change number
	CNF					Order confirmation number
vPrecedingDocNo	DocNo	1	X			Number of preceding document <i>The document to which possible changes in this document are related.</i>

vClientNumber	Value	1	X			Client number Number, which is used by the vendor (supplier) for his client.
vClientID	ClientID	*				Client ID
vClientClass	ClientClass	*				Client classification
vVendorNumber	Value	1	X			Vendor (supplier) number Number, which is used by the purchaser (client) for his vendor.
vSupplierID	SupplierID	*				Supplier ID
vSupplierClass	SupplierClass	*				Supplier classification
vDocCurrency	DocCurrency	1	X			Currency of document
vIncoTerm	IncoTerm	1	1			Inco Terms (terms of delivery) Different terms of delivery can be specified within the header text "Delivery conditions".
vIncoTermLocation	IncoTermLoc	1	1			Location concerning Inco Terms
vPartialDelivery	PartDelivery	1	X			Allow partial deliveries?
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	1+	X			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.

3.7 Frame element **hdrDocNo** – Header: Document numbers

Element	Type	Rec	M.	Key	Mod	Description
hdrDocNo	DocNo	*				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 change. As needed, specific items in other documents can be referenced in frame element itmDocNo.

The indication of the order change number itself as well as of the number of the direct preceding document is not permitted here because they already are specified in frame element `docHeader` (element `vOrderChangeNo` resp. `vPrecedingDocNo`).

3.8 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 change header. At least the document date (`DOC`) must be specified. Furthermore a requested delivery date (`CRD`) can be specified for instance.

3.9 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

Examples of usage: Commission details (`COM`) "Commission Smith"
 Project number (`PJN`) "576134"
 Sales organization (`SOR`) "ABCD"

3.10 Frame element `hdrAddress` – Header: Addresses

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrAddress</code>	<code>Address</code>	1+		!		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

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
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.

3.11 Frame element `hdrCom` – Header: Communication

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrCom</code>	<code>Com</code>	*		!		Header: Communication

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

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

3.12 Frame element `hdrContact` – Header: Contacts

Element	Type	Rec	M.	Key	Mod	Description
<code>hdrContact</code>	<code>Contact</code>	*				Header: Contacts

Subelement	Type	Rec	M.	Key	Mod	Description
<code>vContactType</code>	<code>ContactType</code>	1	X			Type of contact
<code>vContactNumber</code>	<code>Value</code>	1				Contact number
<code>vTitle</code>	<code>Value</code>	1				Title
<code>vFirstName</code>	<code>FirstName</code>	1				First name
<code>vLastName</code>	<code>LastName</code>	1	X			Last name
<code>hdrCom</code>	<code>Com</code>	*				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).

3.13 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

3.14 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>"

3.15 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 document items of an order change is specified. This can be used as check-sum during processing of the document.

Further details such as discounts are optional, but can be used for control at the processing. In addition, sales prices can be returned for countercheck.

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 change:

Net value of order change item 1 is \$ 100,00
 Net value of order change 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 conditions as total of the order change 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
 In addition to this also the net value (sales) of the precedent order confirmation is quoted, which should usually match the net value (purchase) of the order change.

```
<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>
<hdrPricing aCondNo="4">
  <vConditionType aCondArea="S">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).

3.16 Frame element hdrPayment – Header: Terms of payment

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

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

3.17 Frame element docArticleItem – Document item: Article

Element	Type	Rec	M.	Key	Mod	Description
docArticleItem	Item	1+	X	!	D	Document item: Article
	Attribute					
	aItemNo		X	!		Consecutive number of document item
	aAction		X		D	Action
	aUUID		X		D	Universally Unique Identifier

Subelement	Type	Rec	M.	Key	Mod	Description
vPrecDocItemNo	DocItemNo	1	X			Number of item in preceding document <i>The (direct) preceding document is specified in the document header.</i>
vOrdChgItemNumber	DocItemNo	1	X			Order change item number <i>Unique order item number in an order change.</i>
vOrdChgTopLevelNo	DocItemNo	1				Number of higher level order change item
vOrdChgCompNo	DocItemNo	1	3			Number of order change item of the composite article <i>This reference defines that the article is automatically created by the composite article.</i>
vOrdChgSubArtId	CompSubArtId	1	3			Identification of the sub article for the order change item <i>The ID is assigned by the composite article.</i>
vOrdChgAddStateCd	AddStateCode	1				Additional state information of the order change item
vOrdChgAddStateCd2	AddStateCode	1				Additional state information for encapsulated OFML instance
vClientArticleNo	ClientArtNo	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
vOrdChgQuantity	Quantity	1	X			Order quantity
vOrdChgUnit	QuantUnit	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 change item.

If a change was made to at least one sub element compared to the preceding document (see document header), value M must be specified for attribute aAction. For the modified sub elements, the attribute must be set accordingly. If there were no changes, attribute aAction can be omitted or value N must be specified.

Due to the interaction of the item number (vOrdChgItemNumber) and the number of the higher-level item (vOrdChgTopLevelNo) a hierarchy structure (e.g. including sub articles) can be displayed. By referring to a higher-level item of type docFolderItem, also folder structures can be displayed.

Specific item numbers, 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.

The additional state information for the encapsulated OFML instance (vOrdChgAddStateCd2) is required if the instance that represents the article is encapsulated by a Meta type instance and shares a position with it. (The code for the Meta type instance then must be specified in vOrdChgAddStateCd.)

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 for the order change item** can only be specified if the **Number of order change item of the composite article** is specified.

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 modified articles and custom articles (compare global OEX value type VendorArtNo → aStatus).

3.18 Frame element docSetItem – Document item: Set article

Element	Type	Rec	M.	Key	Mod	Description
docSetItem	Item	*		!	D	Document item: Set article
	Attribute					
	aItemNo		X	!		Consecutive number of document item
	aAction		X		D	Action
	aUUID		X		D	Universally Unique Identifier

Subelement	Type	Rec	M.	Key	Mod	Description
vPrecDocItemNo	DocItemNo	1	X			Number of item in preceding document <i>The (direct) preceding document is specified in the document header.</i>
vOrdChgItemNumber	DocItemNo	1	X			Order change item number <i>Unique order item number in an order change.</i>
vOrdChgTopLevelNo	DocItemNo	1				Number of higher level order change item
vClientArticleNo	ClientArtNo	1				Article number of client
vVendorArticleNo	VendorArtNo	1	1			Article number of vendor (supplier)
vVendorID	VendorID	1				Vendor ID
vVendorSeries	VendorSeries	1				Vendor Series
vOrdChgQuantity	Quantity	1	X			Order quantity
vOrdChgUnit	QuantUnit	1	X			Order unit
itmDocNo	DocNo	*				Item: Document numbers

itmText	Text	*	1			Item: Texts
itmReference	Reference	*				Item: References
itmPricing	Pricing	*				Item: Pricing

A set article summarizes several articles (sub items) into one position. The price of a set article is automatically calculated according to the articles contained in it (including quantities and discounts) and according to the quantity of the set article. If the set position contains **itmPricing** sub elements, these only serve for information, i.e., the prices indicated there are not part of the price calculation at header level (document).

For the use of attribute **aAction** and of the item numbers, see frame element **docArticleItem**.

Explanation of mandatory details:

- 1 If no **vendor article number** is specified, the **article short text** has to be specified (sub element **itmText**).

3.19 Frame element **docFolderItem** – Document item: Folder

Element	Type	Rec	M.	Key	Mod	Description
docFolderItem	Item	*		!	D	Document item: Folder
	Attribut				D	
	aItemNo		X	!		Consecutive number of document item
	aAction		X		D	Action
	aUUID		X		D	Universally Unique Identifier

Subelement	Type	Rec	M.	Key	Mod	Description
vPrecDocItemNo	DocItemNo	1				Number of item in preceding document <i>The preceding document is specified in the document header.</i>
vOrdChgItemNumber	DocItemNo	1	X			Order change item number <i>Unique order item number (within the order).</i>
vOrdChgTopLevelNo	DocItemNo	1				Number of higher level order change item
vFolderName	Value	1	X			Name of folder <i>(in language of document)</i>
itmText	Text	*				Position: Texts
itmReference	Reference	*				Position: References

For the use of attribute **aAction** and of the item numbers, see frame element **docArticleItem**.

3.20 Frame element **docTextItem** – Document item: Texts

Element	Type	Rec	M.	Key	Mod	Description
docTextItem	Item	*		!	D	Document item: Text
	Attribut				D	
	aItemNo		X	!		Consecutive number of document item
	aAction		X		D	Action
	aUUID		X		D	Universally Unique Identifier

Subelement	Type	Rec	M.	Key	Mod	Description
vPrecDocItemNo	DocItemNo	1				Number of item in preceding document <i>The preceding document is specified in the document header.</i>
vOrdChgItemNumber	DocItemNo	1	X			Order change item number <i>Unique order item number (within the order).</i>
vOrdChgTopLevelNo	DocItemNo	1				Number of higher level order change item
vItemName	Value	1	X			Name of item <i>(in language of document)</i>
itmText	Text	*				Position: Texts

For the use of attribute aAction and of the item numbers, see frame element docArticleItem.

3.21 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

3.22 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.

3.23 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	DocItemNo	1				Number of document item

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

3.24 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.

3.25 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.

3.26 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	1				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.

3.27 Frame element itmCom – Item: Communication

Element	Type	Rec	Ma	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.

3.28 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.

3.29 Frame element itmText – Item: Texts

Element	Type	Rec	M.	Key	Mod	Description
itmText	Text	*		!		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

3.30 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 (<i>language of document</i>)

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.

3.31 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
vQuantUnit	QuantUnit	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 such as discounts are optional, but can also be used as check during processing. Furthermore, purchase values for cross-checking can be returned.

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

The quantity unit is provided in the case of purchase conditions (aCondArea="P") by the order quantity unit (vOrderUnit) and in the case of terms of sale (aCondArea="S") by the confirmed order quantity unit (vConfOrdUnit) if not indicated differently.

Example 1 – Specification of the net value (purchase) of the order change 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 the net value purchase (client) and sales (supplier) of the order change tem:

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

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

Order quantity = 2

Order unit = C62

```
<itmPricing aCondNo="2">
  <vConditionType aCondArea="P">TNET</vConditionType>      ! TNET = Order quantity x Net unit price
  <vConditionValue>100.00</vConditionValue>
  <vCondCurrency>USD</vCondCurrency>
</itmPricing>
<itmPricing aCondNo="1">
  <vConditionType aCondArea="S">TNET</vConditionType>      ! TNET = Order quantity x Net unit price
  <vConditionValue>100.00</vConditionValue>
  <vCondCurrency>USD</vCondCurrency>
</itmPricing>
```

Example 3 – Specification of several conditions of the order change 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

Quoting values of the preceding order confirmation (sales)

```
<itmPricing aCondNo="1">
  <vConditionType aCondArea="P">SGRO</vConditionType>
  <vConditionValue>50.00</vConditionValue>
  <vCondCurrency>EUR</vCondCurrency>
  <vPriceUnit>1</vPriceUnit>
  <vQuantUnit>C62</vQuantUnit>
</itmPricing>
<itmPricing aCondNo="2">
  <vConditionType aCondArea="P" aCondRef="1" aTypeDis="BD" aCondSign="-">DISI</vConditionType>
  <vConditionValue>10.00</vConditionValue>
  <vConditionRate>20.00</vConditionRate>
  <vCondCurrency>EUR</vCondCurrency>
  <vConditionText>Basic discount</vConditionText>
  <vPriceUnit>1</vPriceUnit>
  <vQuantUnit>C62</vQuantUnit>
</itmPricing>
<itmPricing aCondNo="3">
  <vConditionType aCondArea="P" aCondRef="2" aTypeDis="D1" aCondSign="-">DISI</vConditionType>
  <vConditionValue>2.00</vConditionValue>
  <vConditionRate>5.00</vConditionRate>
  <vCondCurrency>EUR</vCondCurrency>
  <vConditionText>Showroom discount</vConditionText>
  <vPriceUnit>1</vPriceUnit>
  <vQuantUnit>C62</vQuantUnit>
</itmPricing>
<itmPricing aCondNo="4">
  <vConditionType aCondArea="P">SNET</vConditionType>
  <vConditionValue>38.00</vConditionValue>
  <vCondCurrency>EUR</vCondCurrency>
  <vPriceUnit>1</vPriceUnit>
  <vQuantUnit>C62</vQuantUnit>
</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>EUR</vCondCurrency>
</itmPricing>
<itmPricing aCondNo="6">
  <vConditionType aCondArea="P" aTaxCode="1">TTNE</vConditionType>
  <vConditionValue>76.00</vConditionValue>
  <vCondCurrency>EUR</vCondCurrency>
</itmPricing>
<itmPricing aCondNo="7">
  <vConditionType aCondArea="P" aCondRef="6" aTaxCode="1">TTAX</vConditionType>
  <vConditionValue>14.44</vConditionValue>
  <vConditionRate>19.00</vConditionRate>
  <vCondCurrency>EUR</vCondCurrency>
</itmPricing>
# additional indication of the values of the previous order confirmation
<itmPricing aCondNo="8">
  <vConditionType aCondArea="S">SNET</vConditionType>
  <vConditionValue>38.00</vConditionValue>
  <vCondCurrency>EUR</vCondCurrency>
  <vPriceUnit>1</vPriceUnit>
  <vQuantUnit>C62</vQuantUnit>
</itmPricing>
<itmPricing aCondNo="9">
  <vConditionType aCondArea="S">TNET</vConditionType>
  <vConditionValue>76.00</vConditionValue>
  <vCondCurrency>EUR</vCondCurrency>
</itmPricing>
```


4 Appendix

4.1 History of modification

Version	Modification
3.0.0 – 30.11.2017	<ul style="list-style-type: none"> ▪ Global changes according to specification GLOBAL 3.0.0 ▪ Changes in the structure of this specification ▪ Frame element <code>oexDocument</code> (Single document): Clarification on the use of attribute <code>aAction</code> ▪ Frame element <code>docHeader</code>: Element <code>vOrderChangeNo</code> now has type <code>DocNo</code>. Element <code>vOrderNumber</code> has been replaced by new elements <code>vPrecedingDocType</code> and <code>vPrecedingDocNo</code> indicating the (immediate) preceding document. ▪ Frame element <code>hdrDocNo</code>: The number (ID) of the immediate preceding document may no longer be specified here. ▪ Frame element <code>docItem</code> renamed <code>docArticleItem</code>. ▪ Frame element <code>docArticleItem</code>: new element <code>vPrecDocItemNo</code> for the number of the item in the preceding document. Following elements removed: <code>vOrderItemNumber</code>, <code>vOrderTopLevelNo</code>, <code>vOrderComposNo</code>, <code>vOrderSubArtId</code>, <code>vOrderAddStateCd</code>, <code>vOrderQuantity</code> and <code>vOrderUnit</code>. ▪ Frame element <code>docArticleItem</code>: new (optional) element <code>vOrdChgAddStateCd2</code> for additional state code for possibly encapsulated OFML instance. ▪ Frame element <code>docArticleItem</code>: element <code>vClientArticleNo</code> now has type <code>ClientArtNo</code> (was <code>Value</code>). ▪ New frame elements <code>docFolderItem</code> (Document item: Folder), <code>docTextItem</code> (Document item: Text) and <code>docSetItem</code> (Document item: Set article).
2.3.1 – 13.1.2017	<ul style="list-style-type: none"> ▪ Correction: element <code>vOrderChangeNo</code> (order change number) in frame element <code>docHeader</code> (2.8 Document header) was substituted for <code>vOrderConfirmNo</code>.
2.3.0 – 1.7.2015	<ul style="list-style-type: none"> ▪ Global changes according to specification GLOBAL 2.3.0 ▪ Introduced new optional element <code>vClassification</code> in frame element <code>docItem</code> (2.19 Document item) for universal specification of categories or classes.
2.2.0 – 11.10.2013	<ul style="list-style-type: none"> ▪ Global changes according to specification GLOBAL 2.2.0 ▪ Introduced new optional elements in frame element <code>docHeader</code> (2.8 Document header) 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 <code>hdrAddress</code> (2.12 Header: Addresses) and <code>itmAddress</code> (2.25 Item: Addresses) 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 <code>docItem</code> (2.19 Document item) for identification of sub article and additional state information (each for the order item and the order confirmation item) as well as for catalog ID: <code>vOrderSubArtId</code> resp. <code>vOrdConfSubArtId</code>, <code>vOrderAddStateCd</code> resp. <code>vOrdConfAddStateCd</code> and <code>vCatalogId</code>
2.1.0 – 09.02.2010	Initial English version