

# **eXtensible Business Documents**

## **Invoice/credit note**

Version 1.2

Last updated, 11 March 2015

# XBD invoice specification

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## *Version history*

2010-05-10 – Version 1.0.

2010-09-02 – Version 1.1. Replaced “<country>” with “<countryCode>”.

2012-11-21 – Version 1.1. Added Entity references chapter.

2012-11-27 – Version 1.2. Added <invoiceRef> on credit notes.

2013-01-08 – Version 1.2. Added <yourRef>.

2013-01-31 – Version 1.2. Added <bankAccountNum>.

# XBD invoice specification

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This document describes the XBD-invoice format. The XBD-format (eXtensible Business Documents) is specified by Yggdra AS.

## Filename

The recommended filename is: **XBD invoice x.xml** where x is the invoice number (invoiceId). The filename must be unique to allow several files to be saved in the same folder.

Only one invoice is allowed per file.

## General guidelines

- *Encoding:* Use **ISO-8859-1** or **UTF-8**
- *Decimal delimiter shall be:* **A period**
- Empty elements can be omitted.
- *Date format shall be:* yyyy-mm-dd

The xml-file starts with an XML declaration, declaring the xml-version and the encoding.

Ex.: `<?xml version="1.0" encoding="ISO-8859-1"?>`

The root element shall be:

`<xbd:invoice xmlns:xbd="http://ns.yggdra.no/xbd/" version="1.2">`

The version number in this element corresponds to the version number of this document. The versions and the xdb-namespaces are managed by Yggdra AS. You may visit [www.yggdra.no/xbd](http://www.yggdra.no/xbd) to check for updated documentation, example files or other document types.

## Extension

If the format doesn't contain all relevant fields, it can be extended. To do so, give the extension a unique name and include an extension attribute in the `<xbd:invoice>`-tag. Then add the new fields where it naturally belongs.

Ex.:

`<xbd:invoice extension="Acme" version="1.2" xmlns:xbd="http://ns.yggdra.no/xbd/" >`  
`<invoiceId>4774455787</invoiceId>`

...

..

.

`<myField>My data</myField>`

The difference between the standard XBD-version and the extension must be agreed upon by the involved parties.

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## Entity references

String elements (text) that contains special characters (& < > ” or ‘) must be coded by using the pre-declared entities:

&     => &amp;  
<     => &lt;  
>     => &gt;  
"     => &quot;  
'     => &apos;

For example, the name “AT & T” should be coded as <name>AT &amp; T</name>. This is done automatically by most xml-software.

## Structure

All direct child elements of the root element, except for the line elements must only occur ones or not at all.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xbd:invoice xmlns:xbd="http://ns.yggdra.no/xbd/" version="1.2">
  <invoiceId>4774455787</invoiceId>
  <invoiceDate>2010-04-23</invoiceDate>
  ...
  ..
  .
  <line>
    <itemId>4554382</itemId>
    ...
    ..
  </line>
  <line>
    <itemId>4534534</itemId>
    ...
  </line>
</xbd:invoice>
```

See the example file for more details.

## Markup

Markup is used to state charges like administration fee, environmental tax or freight. Markup can be connected to an invoice line or to the header level of the invoice. Markup that is not environmental tax or freight should be summed up in the mischarges field.

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## Calculated fields

Some fields are dependent on the values of other fields. These calculated fields can be used to check the invoice for errors.

Line amount are calculated by multiplying the quantity with the unit price after discount. The discount can be stated as an amount per unit or as a percent. The following formula shows the relation:

Line amount = quantity \* (unit price – discount amount – ((unit price – discount amount) \* discount percent / 100)).

Sum line amount = sum of line amount from all lines.

Sum markup amount = the sum of all markup amounts (from lines and heading).

Sum VAT amount = sum of all VAT amounts (from lines and markup).

Invoice amount = sum line amount + sum markup amount + sum VAT amount + round off

## Simple Data types

Type	Description	Examples
<b>str</b>	Dynamic string of unlimited length.	<code>&lt;note&gt;This is a note...&lt;/note&gt;</code>
<b>str 3</b>	String with a maximum of 3 characters.	<code>&lt;currencyCode&gt;NOK&lt;/currencyCode&gt;</code>
<b>date</b>	Any date. Format: yyyy-mm-dd	<code>&lt;invoiceDate&gt;2010-04-23&lt;/invoiceDate&gt;</code>
<b>number</b>	Any number. Use period as a decimal sign. Use a minus sign directly in front of the number to indicate a negative number. Do not use thousand separators. <b>Note:</b> For the number zero, use 0, 0.0 or 0.00, not an empty element.	<code>&lt;invoiceAmount&gt;9709.94&lt;/invoiceAmount&gt;</code> <code>&lt;invoiceAmount&gt;-9709.94&lt;/invoiceAmount&gt;</code> <code>&lt;quantity&gt;1&lt;/quantity&gt;</code> <code>&lt;quantity&gt;0.5&lt;/quantity&gt;</code> <code>&lt;quantity&gt;0&lt;/quantity&gt;</code> <code>&lt;quantity&gt;0.0&lt;/quantity&gt;</code> <b>Not:</b> <code>&lt;quantity /&gt;</code> <b>Not:</b> <code>&lt;quantity&gt;&lt;/quantity&gt;</code>

## Complex data types

Type	Description	Examples
<b>invoice</b>	An XML element which can contain the following elements: <ul style="list-style-type: none"><li>• invoiceId</li><li>• invoiceDate</li><li>• deliveryDate</li></ul>	<code>&lt;xbd:invoice version='1.2'</code> <code>xmlns:xbd='http://ns.yggdra.no/xbd/'&gt;</code> <code>&lt;invoiceId&gt;4774455789&lt;/invoiceId&gt;</code> <code>&lt;invoiceDate&gt;2010-04-23&lt;/invoiceDate&gt;</code> <code>&lt;deliveryDate&gt;2010-04-20&lt;/deliveryDate&gt;</code> <code>&lt;dueDate&gt;2010-05-23&lt;/dueDate&gt;</code> <code>&lt;paymentId&gt;47744557874&lt;/paymentId&gt;</code> <code>&lt;bankAccountNum&gt;12341212345&lt;/bankAccountNum&gt;</code>

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	<ul style="list-style-type: none"> <li>• dueDate</li> <li>• paymentId</li> <li>• bankAccountNum</li> <li>• currencyCode</li> <li>• invoiceAmount</li> <li>• sumLineAmount</li> <li>• sumMarkupAmount</li> <li>• sumVatAmount</li> <li>• roundOff</li> <li>• paymentTerm</li> <li>• cashDisc</li> <li>• deliveryTerm</li> <li>• purchaseId</li> <li>• projId</li> <li>• packingSlipId</li> <li>• deliveryRef</li> <li>• invoiceRef</li> <li>• yourRef</li> <li>• ourRef</li> <li>• note</li> <li>• issuer</li> <li>• receiver</li> <li>• delivery</li> <li>• environmentalTax</li> <li>• freight</li> <li>• miscCharges</li> <li>• one or more line elements</li> </ul>	<pre> &lt;currencyCode&gt;NOK&lt;/currencyCode&gt; &lt;invoiceAmount&gt;71275.00&lt;/invoiceAmount&gt; &lt;sumLineAmount&gt;55900.00&lt;/sumLineAmount&gt; &lt;sumMarkupAmount&gt;1120.00&lt;/sumMarkupAmount&gt; &lt;sumVatAmount&gt;14255.00&lt;/sumVatAmount&gt; &lt;roundOff&gt;0&lt;/roundOff&gt; &lt;paymentTerm/&gt; &lt;cashDisc/&gt; &lt;deliveryTerm/&gt; &lt;purchaseId&gt;4518375460&lt;/purchaseId&gt; &lt;projId&gt;34445&lt;/projId&gt; &lt;packingSlipId/&gt; &lt;deliveryRef/&gt; &lt;invoiceRef/&gt; &lt;yourRef/&gt; &lt;ourRef/&gt; &lt;note/&gt; &lt;issuer&gt;...&lt;/issuer&gt; &lt;receiver&gt;...&lt;/receiver&gt; &lt;delivery&gt;...&lt;/delivery&gt; &lt;environmentalTax&gt;... &lt;/environmentalTax&gt; &lt;freight&gt;... &lt;/freight&gt; &lt;miscCharges&gt;... &lt;/miscCharges&gt; &lt;line&gt;... &lt;/line&gt; &lt;line&gt;... &lt;/line&gt; &lt;/xbd:invoice&gt; </pre>
<b>markup</b>	<p>An XML element which can contain the following elements:</p> <ul style="list-style-type: none"> <li>• description</li> <li>• markupAmount</li> <li>• vatPercent</li> <li>• vatAmount</li> </ul>	<pre> &lt;freight&gt; &lt;description&gt;Frakt&lt;/description&gt; &lt; markupAmount &gt;10.00&lt;/markupAmount &gt; &lt;vatPercent&gt;25&lt;/vatPercent&gt; &lt;vatAmount&gt;2.50&lt;/vatAmount&gt; &lt;/freight&gt; </pre>
<b>organization</b>	<p>An XML element which can contain the following elements:</p> <ul style="list-style-type: none"> <li>• vatNum</li> <li>• gln</li> <li>• name</li> <li>• street</li> <li>• zipCode</li> <li>• city</li> <li>• countryCode</li> </ul>	<pre> &lt;issuer&gt; &lt;vatNum&gt;NO538546587MVA&lt;/vatNum&gt; &lt;gln&gt;8003507990021&lt;/gln&gt; &lt;name&gt;Acme Co&lt;/name&gt; &lt;street&gt;Gata 4&lt;/street&gt; &lt;zipCode&gt;0624&lt;/zipCode&gt; &lt;city&gt;OSLO&lt;/city&gt; &lt;countryCode&gt;NO&lt;/countryCode&gt; &lt;/issuer&gt; </pre>
<b>invoiceLine</b>	<p>An XML element which can contain the following</p>	<pre> &lt;line&gt; &lt;itemId&gt;4554380&lt;/itemId&gt; </pre>

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elements:	<description>Oppvaskmaskin</description>
• itemId	<unitCode>EA</unitCode>
• description	<quantity>1</quantity>
• unitCode	<unitPrice>6000.00</unitPrice>
• quantity	<discountAmount>100.00</discountAmount>
• unitPrice	<discountPercent/>
• discountAmount	<lineAmount>5900.00 </lineAmount>
• discountPercent	<vatPercent>25</vatPercent>
• lineAmount	<vatAmount>1475.00</vatAmount>
• vatPercent	<environmentalTax/>
• vatAmount	<freight>
• environmentalTax	<description>Frakt</description>
• freight	<markupAmount>1000.00</markupAmount>
• miscCharges	<vatPercent>25</vatPercent>
• note	<vatAmount>250.00</vatAmount>
	</freight>
	<note/>
	</line>

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### Field description

Field	Type	Mandatory	Description
bankAccountNum	str 30	Yes	The bank account number to pay the invoice amount to.
cashDisc	str 30	No	A description of the cash discount.
city	str 60	Yes	The name of the city. F. ex. OSLO
countryCode	str 2	Yes	Country code according to ISO 3166. F. ex. NO for Norway or DK for Denmark.
currencyCode	str 3	Yes	Currency code according to ISO 4217. F. ex. NOK for Norwegian kroner.
delivery	organization	Yes	Identifies the receiver of the goods.
deliveryDate	Date	Yes	The date of the delivery.
deliveryRef	str 30	No	A reference to the receiver of the goods.
deliveryTerm	str 30	No	The terms of delivery.
description	str 30	Yes	A description of the invoice line or markup.
discountAmount	number	No	Used to specify discount as an amount per unit.
discountPercent	number	No	Used to specify discount in percent.
dueDate	Date	Yes	The due date.
environmentalTax	markup	No	Used to specify environmental tax markup.
freight	markup	No	Used to specify freight as a markup.
gln	str 13	Yes	The organizations Global Location Number
invoiceAmount	number	Yes	The total invoice amount including all markup and taxes.
invoiceDate	Date	Yes	The invoice date.
invoiceId	str 20	Yes	The invoice number.
invoiceRef	str 20	No	Used on credit notes only. A reference to the credited invoice.
issuer	organization	Yes	The issuer of the invoice.
itemId	str 20	Yes	Identification code of an item.
line	invoiceLine	Yes	An invoice line.
lineAmount	number	Yes	Line amount are calculated by multiplying the quantity with the unit price after discount.
markupAmount	number	Yes	A markup amount.
miscCharges	markup	No	Miscellaneous charges.
name	str 30	Yes	The organizations name.
note	Str	No	A note connected to a line or to the header.
packingSlipId	str 30	Yes	Identification of the packing slip(s) connected to the invoice (separated by a comma). F. ex. 1233234, 1233250



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paymentId	str 30	No	Payment identification used for the payment of the invoice.
paymentTerm	str 30	No	The terms of payment.
purchaseId	str 20	Yes	The receivers purchase number. This number comes originally from the purchasers order file.
quantity	number	Yes	The invoiced quantity.
receiver	organization	Yes	Identifies the receiver of the goods.
roundOff	number	No	Used to round off the invoice amount.
street	str 250	No	The street address of the organization.
sumLineAmount	number	Yes	A sum of all lineAmount fields.
sumMarkupAmount	number	Yes	A sum of all markupAmount fields.
sumVatAmount	number	Yes	A sum of all vatAmount fields.
unitCode	str 2	Yes	Unit code according to the DoD-standard. Use EA for each. PR for pair. MR for meter.
unitPrice	number	Yes	The price per unit.
vatAmount	number	Yes	The VAT amount.
vatNum	str 20	No	The organizations VAT Number.
vatPercent	number	Yes	The VAT percent of the invoice line or the markup.
yourRef	str 30	No	A reference for the receiver.
zipCode	str 10	Yes	The organizations zip code.

### **Credit notes**

The difference between an invoice and a credit note is that some fields are negative on a credit note. Just add a minus sign in front of the numbers to indicate that the quantity and/or the amount are negative.

The fields to negate are the quantity of the lines and the amount of the markup elements. As a result, the calculated fields (lineAmount, vatAmount, sumLineAmount, sumMarkupAmount, sumVatAmount and invoiceAmount) will also be negated.

A credit note can reference an earlier invoice. Use the field <invoiceRef> to specify the invoice number of the invoice.