TEAPPSXML v.2.7.2



TEAPPSXML v.2.7.2

Implementation Guide

17.3.2011

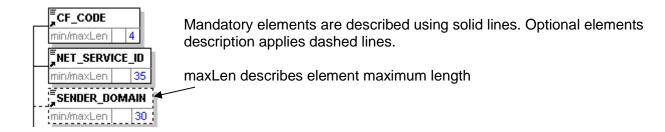
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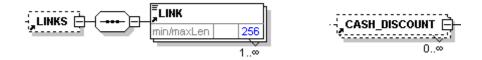
1 Introduction

1.1 Tree-structure notation

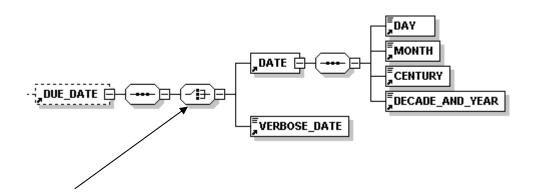


Element occurrence

- element in solid line box; element is mandatory and occurs once
- element in dashed-line box; element occurs 0-1 times and is optional
- notation 0..∞ under the element states that element occurs 0..n times
- notation 1..∞ under the element states that element occurs 1..n times



Examples above describes that element LINKS consists sub-element LINK that can occur 1-n times. CASH_DISCOUNT element can occur 0-n times.



This is notation for choice structure. DUE_DATE-element can have as a sub-element either DATE-element or VERBOSE DATE element, but not both at the same time.



1.2 Entities

XML-standard predefined standard entities must be used in TEAPPSXML-message instead of special characters. The entities are as follows:

&	&
<	<
>	>
"	"
,	'

For example, in a TEAPPSXML document the company name TILI & LASKENTA OY is expressed as follows:

```
<CUSTOMER_NAME>TILI &amp; LASKENTA OY</CUSTOMER_NAME>
```

The entities are included in the maximum length of the element content, so for example the entity & takes up the space of five characters in the element content.

TEAPPSXML-message must steer the ISO-8859-1-character-set. Character € doesn't contain in this character set. Recommendation is to use common symbol EUR in currency elements.

1.3 Decimal separator

In TEAPPXML –messages the decimal separator is . (full stop). No separators are used between thousands.

Services will use for money amounts common Finnish presentations in default TEAPPSXML layouts.

1.4 The number of decimals

In the invoice presentation type, the service uses the original, unaltered invoice material for decimal presentation. For example, if the total sum of the invoice is expressed in five decimals in the invoice material, the same number of decimals will be repeated on the invoice layout. It is therefore desirable that the invoicing system produces the same number of decimals that should be printed on the eLetter/net-invoice.

The numerical value of the AMOUNT elements may consist of a maximum of 15 integers and 6 decimals. Percentages may consist of a maximum of 4 integers and 6 decimals, and quantities of 12 integers and 5 decimals.



1.5 Spaces, prefix zeros and per cent numbers

In numerical elements, extra spaces prevent receiving of the material in the services. Prefix zeros should not be added to elements, unless the user wants them printed. The only exception is small amounts of money (for example 0.60 EUR); in this case prefix zeros are naturally mandatory.

Examples:

Amounts of money expressed with two decimals without any spaces before or after the figure

```
<INVOICE_TOTAL>
<AMOUNT SIGN="+" VAT="INCLUDED">362.30</AMOUNT>
</INVOICE_TOTAL>
```

A percentage, such as 13.00, is expressed without a prefix zero and without space before/after the figure. Percentages are expressed without the % character.

```
<INTEREST_RATE>13.00</INTEREST_RATE>
```

XML-messages are used in electronic processing and messages cannot contain format commands, for example line feeds.

1.6 Attributes SIGN and VAT - indicating sign and taxability

For elements containing amounts of money, two attributes are used: SIGN and VAT. The SIGN attribute indicates whether the amount is positive or negative. Acceptable values for this attribute are + or -. The VAT attribute indicates whether the amount is inclusive or exclusive of tax. Acceptable values for the VAT attribute are INCLUDED (with tax) or EXCLUDED (without tax). The VAT and SIGN attributes are used with the AMOUNT element. For positive values of AMOUNT element SIGN attribute could also miss, but it is recommended. SIGN-attribute should be minus (-) in credit notes - at least row and invoice sums – it helps and clarifies further processing of invoice.

Examples:



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```
<SUMMARY>
  <ROWS TOTAL>
     <AMOUNT SIGN="+" VAT="EXCLUDED">601.83</AMOUNT>
  </ROWS TOTAL>
  <INVOICE_TOTAL>
     <AMOUNT SIGN="+" VAT="EXCLUDED">601.83</AMOUNT>
     <AMOUNT SIGN="+" VAT="INCLUDED">734.20</AMOUNT>
  </INVOICE TOTAL>
  <VAT SUMMARY>
     <RATE>22.00</RATE>
     <ACCORDING>
        <AMOUNT SIGN="+">601.83</AMOUNT>
     </ACCORDING>
     <VAT_RATE_TOTAL>
        <AMOUNT SIGN="+">132.40</AMOUNT>
     </VAT RATE TOTAL>
  </VAT_SUMMARY>
  <VAT_TOTAL>
     <AMOUNT SIGN="+">132.40</AMOUNT>
  </VAT TOTAL>
  <ROUNDINGS>-0.03</ROUNDINGS>
</SUMMARY>
```

1.7 Occurrence of elements (mandatory/optional)

TEAPPSXML description has a small number of mandatory elements, the rest of the elements are optional. However, some of these optional elements are such that if they occur in the material, they include mandatory sub-elements. In the TEAPPSXML tree structure the type of element has been indicated using borders: a continuous line represents a mandatory element and a dotted line represents an optional element.

Furthermore, some of the elements have a check-up for not to be empty elements, if it exists in TEAPPSXML-material. In other words, if no data is going to be entered for example into the ROW/DISCOUNT/PER_CENT element, the entire element can be omitted from the material.

It is not advisable to add empty elements in the material unless necessary. If a value is not going to be entered in the element and is not mandatory, it is recommendable to leave out the entire element. This helps reduce the physical size of the material. For example if invoice doesn't include archive or attachment information, don't create empty CONTROL - structure below INVOICE -structure.

Nevertheless, the material must contain all of the information that will be forwarded to the recipient of the invoice. If any element has a value, it will be displayed on the net-invoice/printed on the netinvoice/eLetter. The service does not filter out any information from the delivered material.

1.8 Same element in Invoice- and Row-level

Some elements or element structures (eg. TERMS_OF_DELIVERY, CREDIT_INVOICE_NUMBER, ORDER_INFORMATION) do exist both in INVOICE-structure and ROW-structure. If data does apply into whole invoice then it should be placed



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into INVOICE-structure. If data does change according to invoice rows then it should be placed into ROW-structure.

1.9 Format of dates

To maximize flexibility date structure in TEAPPSXML consists of elements DAY, MONTH, CENTURY and DECADE_AND_YEAR. It is recommended to use 2 characters in elements DAY and MONTH i.e. value of the first day of the month should be "01".

```
INVOICE_DATE

INVOICE_DATE

INVOICE_DATE

CENTURY

CENTURY

CENTURY>

COMPAND

CENTURY>

CENTURY>

COMPAND

CENTURY>

COMPAND

COMPAN
```

1.10 Country and language codes

One should use ISO 3166 standard codes for TEAPPSXML COUNTRY-CODE and LANGUAGE-CODE elements (FI=Finnish, SE=Swedish, GB = English, DE = German, EE= Estonian etc.).

1.11 LINK-element

LINK-element consists of two optional attributes TYPE and OBJECT. OBJECT-attribute aims to guarantee compatibility with Finvoice version 1.3 link information. Values for OBJECT-attribute should be Finvoice 1.3 link element identifiers. Method ensures that link information can be transferred between different formats. TYPE attribute is used to tell link type and suggested values are OPEN, SECURE or BANKCERT.

1.12 Requirements for digital signature

Next elements are mandatory with digital signature:

 country code of receiver RECEIVER/CUSTOMER_INFORMATION/ADDRESS/ COUNTRY_CODE or vat number RECEIVER/CUSTOMER_INFORMATION/ VAT_NUMBER

and



 country code of payee PAYEE/CUSTOMER_INFORMATION/ADDRESS/ COUNTRY_CODE or vat number PAYEE/CUSTOMER_INFORMATION/ VAT NUMBER

2 Processing control

2.1 INVOICE_CENTER/CONTENT_FRAME

Below the INVOICE_CENTER/CONTENT_FRAME element there are some pieces of mandatory tags that coordinate the receiving of the material in the service. Here are the explanations for the key elements as the standard values/acceptable values.

CF_CODE Standard information: CF01, mandatory information

NET_SERVICE_ID Sender's net-service-identification in the receiving service.

Mandatory information.

SENDER_DOMAIN Sender's domain name

BLOCK_ID An identifier provided by the sender, e.g. file name. Mandatory

information.

TIMESTAMP Time stamp (file creation time) in format yyyymmddhhmmss

Mandatory information.

BLOCK RULES/TRANSACTION TYPE

Transaction type, alternatives: 00=invoice, 02=posting Mandatory information.

BLOCK RULES/BLOCK ACTION

Function, alternatives: 00=addition.

Mandatory information.

BLOCK_RULES/BLOCK_METHOD

Batch-specific delivery method is used <u>only in special cases</u> when the services specified in the recipient's and the payee's agreements need to be skipped. For example, value 01 is entered in the BLOCK_METHOD element if the user wants to exceptionally print out the entire material as eLetters when the recipients would normally receive their invoices in electronic format. The same principle is applied with the

INVOICE_CENTER/CONTENT_FRAME/INVOICES/INVOICE/HEADER/MET HOD_OF_INTERCHANGE element, in other words with the invoice-specific delivery method.

Delivery method, alternatives:

01 = Print sales invoice

Batch-specific delivery method has highest priority when considering how the material will be delivered to the recipient. If the delivery method code is missing from the BLOCK_METHOD element, the value of the HEADER/METHOD_OF_INTERCHANGE element will be taken into account.



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The coding used for the BLOCK_METHOD element is also used for the METHOD_OF_INTERCHANGE element.

Normally the material is forwarded in accordance with the agreement signed by the recipient or the payee. When the BLOCK_METHOD and METHOD_OF_INTERCHANGE elements are missing from the sent material, the material is forwarded in accordance with the recipient's agreement. If the recipient has not an agreement, the material will be forwarded in accordance with the payee's agreement information.

BLOCK RULES/BLOCK FORMAT

Data format, the value is TEAPPSXML when sending the TEAPPSXML description compliant material.

Mandatory information

BLOCK RULES/FORMAT VERSION

Version number of the TEAPPSXML description

BLOCK RULES/CHARACTER SET

The character-set used, standard information: ISO-8859-1

2.2 Printing/archiving settings

The information needed to print out a document is compiled under the INVOICE_CENTER/CONTENT_FRAME/BLOCK_DEFAULTS/BLOCK_PRINTING/E-KIRJE element. Below are instructions for the printing settings.

CONTENT_FRAME/BLOCK_DEFAULTS/BLOCK_PRINTING/E-KIRJE/

APM ARCHIVE archiving

alternatives: T (printing only), B (printing and archiving),

C (archiving only)

SERVICE ACTIONS Service action

alternatives: 0 or empty (standard production material), T (test material) → When testing the interface, value T must be used without exception. Mandatory, if the material will be printed out

LETTER CLASS Letter class

alternatives: 1 (1st class), 2 (2nd class)

All invoices from one delivery batch are sent in the same letter class. To send some of the invoices in 1st class and some in 2nd class, a separate invoice batch must be created for each letter class and sent to the service individually.

Mandatory, if the material will be printed out

APM_ARCHIVE_CODE archive application code

FORM_FIRST_PAGE form code, 1st page

Mandatory, if the material will be printed out

FORM_CONT_PAGE form code, continued page form code, specification page



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```
ADVANCED_NOTICE_FIRST_PAGE
ADVANCED_NOTICE_CONT_PAGE
ADVANCED_NOTICE_SPEC_PAGE
```

advance notice, 1st page advance notice, continued page advance notice, specification page

Used form identifiers will be agreed separately during implementation.

In addition, the following information is required in the printing settings rows:

- * RECEIVER/CUSTOMER_INFORMATION/ADDRESS/COUNTRY_CODE If other than FI
- * RECEIVER/CUSTOMER_INFORMATION/ADDRESS/POSTAL_CODE Recipient's postal code

2.3 Acknowledgements from transfer

Acknowledgement will be done if batch is in TEAPPSXML-format and consists TRANSPORT_FRAME or if batch includes TRANSPORT_FRAME data directly or through conversion.

Value for INVOICE_CENTER/TRANSPORT_FRAME/FB_REQUEST element has to be 1 and acknowledgement processing is agreed with the customer.

Invoice message example including Acknowledgement request:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<INVOICE CENTER>
   <TRANSPORT FRAME>
      <TF CODE>TF01</TF CODE>
      <TIMESTAMP>2006080712160500</TIMESTAMP>
      <BATCH_ID>D2408124081.xml</BATCH_ID>
      <CONTENT_RECEIVER>
          <RECEIVER_REF>TE003701011385IC</RECEIVER_REF>
          <CONTENT_REF>D2408124081.xml</CONTENT_REF>
      </CONTENT RECEIVER>
      <SENDER>TE003712345678
      <FB_REQUEST>1</FB_REQUEST>
   </TRANSPORT_FRAME>
   <CONTENT FRAME>
      <CF_CODE>CF01</CF_CODE>
      <NET_SERVICE_ID>TE003712345678</NET_SERVICE_ID>
      <BLOCK_ID>4310</BLOCK_ID>
      <TIMESTAMP>2006080712160500</TIMESTAMP>
      <BLOCK_RULES>
          <TRANSACTION TYPE>00</TRANSACTION TYPE>
          <BLOCK ACTION>00</BLOCK ACTION>
          <BLOCK_FORMAT>TEAPPSXML</BLOCK_FORMAT>
          <FORMAT_VERSION>2.7.1</FORMAT_VERSION>
          <CHARACTER_SET>ISO-8859-1</CHARACTER_SET>
      </BLOCK_RULES>
      <INVOICES>
```

etc.



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Positive acknowledgement example:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<INVOICE_CENTER>
   <TRANSPORT_FRAME>
      <TF_CODE>TF01</TF_CODE>
      <TIMESTAMP>20060807141216898</TIMESTAMP>
      <BATCH_ID>D2408124081.xml</BATCH_ID>
      <CONTENT_RECEIVER>
          <RECEIVER REF>TE003712345678</RECEIVER REF>
          <CONTENT_REF>D2408124081.xml</CONTENT_REF>
      </CONTENT_RECEIVER>
      <SENDER>TE003701011385IC</SENDER>
      <FB_REQUEST>2</FB_REQUEST>
      <REQUEST_MESSAGE>POS</REQUEST_MESSAGE>
       <TF SUMMARY>
          <COUNT>1</COUNT>
          <TOTAL>
              <AMOUNT SIGN="+">197.64</AMOUNT>
          <BATCH_SIZE>3664</BATCH_SIZE>
      </TF_SUMMARY>
   </TRANSPORT_FRAME>
</INVOICE_CENTER>
```

Negative acknowledgement example:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<INVOICE CENTER>
   <TRANSPORT_FRAME>
       <TF_CODE>TF01</TF_CODE>
       <TIMESTAMP>20060807141216898</TIMESTAMP>
       <BATCH_ID>D2408124081.xml</BATCH_ID>
       <CONTENT_RECEIVER>
          <RECEIVER_REF>TE003712345678</RECEIVER_REF>
          <CONTENT REF>D2408124081.xml</CONTENT REF>
       </CONTENT_RECEIVER>
       <SENDER>TE003701011385IC</SENDER>
       <FB REQUEST>2</FB REQUEST>
       <REQUEST_MESSAGE>NEG</REQUEST_MESSAGE>
       <REQUEST_TEXT>Laskujen validointi epäonnistui. Validoinnin tulokset : [Parser error at
       /INVOICE CENTER/CONTENT FRAME/INVOICES/INVOICE/PAYEE] :2:1874 at invoice 2-4081: The content of element
       type "PAYEE" must match
       "(CUSTOMER_INFORMATION,BANKS+,NET_SERVICE_ID?,DOMICILE?,PRELIMINARY_TAX_REGISTERED?,ARCHIVE_ID?,
       NETTING_CODE?, PAYEE_REFERENCE?, METHOD_OF_PAYMENT?, DETAILS_OF_PAYMENT?, BANK_BARCODE?)".
       </REQUEST_TEXT>
       <TF_SUMMARY>
          <COUNT>0</COUNT>
          <TOTAL>
              <AMOUNT SIGN="+">0.00</AMOUNT>
          </TOTAL>
          <BATCH_SIZE>3664</BATCH_SIZE>
       </TF_SUMMARY>
   </TRANSPORT_FRAME>
</INVOICE_CENTER>
```



3 Attachment processing

3.1 Handling of images and attachment files in TEAPPSXML

Besides the composed TEAPPSXML-data file, the uploaded or downloaded zip-file can include attachment files, which could be normal attachment file of invoice created by payee or picture files generated by payee, other operator or own service provider.

A single attachment of invoice is identified according the //INVOICE/CONTROL/IMAGE_CONTROL-structure occurred in the TEAPPSXML structural note. The structure will be repeated according the amount of attachment files of invoice.

The content of IMAGE_FILE-element is the full file-name including suffix. Next some examples of different IMAGE_CONTROL-structures are described. By using these structures can the type of attachment file (attachment file or invoice image) and the producer of attachment file (payee, operator or own service provider) be recognized. The identifying is based on attributes TYPE and SOURCE in IMAGE_CONTROL-element in such a way that the mandatory attribute TYPE expresses the type of attachment file and occurrence or value of the voluntary attribute SOURCE relates the producer. IMAGE_CONTROL –structure has now also optional attribute SIGNED, which are used to tell if attachment is signed or not signed. If attachment is signed, you can tell type of signature.

Attributes to be used in IMAGE CONTROL -structure are the following:

@TYPE

Values allowed:

INVOICE_IMAGE - image of the invoice VOUCHER_MEMO - other attachment SCANNED - scanned image SIGNATURE_VALIDATION - signature validation file SIGNATURE - separate signature file INVOICE_DATA - original invoice

@SOURCE

Values allowed:

ORIGINAL – image/attachment created by payee IC_IMAGE – Image of electronic invoice created by service provider IC – attachment created by service provider

@SIGNED

Values allowed:

YES – signed, type unknown XADES – signed, type XADES CADES – signed, type CADES NO – not signed

Referenced attachment file and the reference have to have exactly same name. Characters in both names are case sensitive. <u>Each invoice should have own attachment file with unique name</u>. Attachment names have to be unique in each invoice batch and also

between different batches. One way to generate unique attachment names is to use method where name consists of free part, unique batch number and unique invoice number inside the batch. Attachment file name body allows numbers 0-9, capital letters A-Z, normal letters a-z and period (.), hyphen (-) and low line (_). Other characters are not allowed for e.g. space sign in attachment should not be used. Long attachment names are not recommended, for example 50 characters should be enough.

Preferred attachment file type is basic pdf which is best supported format in receiving systems and print services. As an exception to this is portfolio pdf, which is not supported as attachment format. Use of other format in attachments has to be discussed and agreed in deployment projects.

Some examples of delivering attachments:

Normal attachment: attachment file produced by payee

The attachment is recognized to be a normal based on the value "VOUCHER_MEMO" of the attribute TYPE in IMAGE_CONTROL-element. The SOURCE-attribute can be absent from IMAGE_CONTROL-element. If the attribute SOURCE exists, its value is "ORIGINAL".

Example:

Invoice image produced by payee or another operator than own service provider

The attachment is recognized to be an invoice image based on the value "INVOICE_IMAGE" of the attribute TYPE in IMAGE_CONTROL-element. The SOURCE-attribute can be absent from IMAGE_CONTROL-element. If the attribute SOURCE exists, its value is "ORIGINAL".

Example:



Invoice image produced by own service provider

The attachment is recognized to be an invoice image based on the value "INVOICE_IMAGE" of the attribute TYPE in IMAGE_CONTROL-element. In the invoice image produced by own service provider always exists SOURCE-attribute by value "IC IMAGE".

Example:

Scanned invoice image: invoice image produced by scanning service

The attachment is recognized to be an invoice image produced by scanning service based on the value "SCANNED" of the attribute TYPE in IMAGE_CONTROL-element. The SOURCE-attribute can be absent from IMAGE_CONTROL-element. If the attribute SOURCE exists, its value is "ORIGINAL".

Example:

Attachment file produced by payee and attachment is also digitally signed by payee

The attachment is recognized to be digitally signed based on value "YES" of the attribute SIGNED. Value of SIGNED -attribute could also be "XADES" or "CADES", that describe also type of signature. If attribute SIGNED is missing or has value "NO", attachment is not signed.

Example:

Invoice image created by own service provider with digital signature

The attachment is recognized to be digitally signed based on value "YES" of the attribute SIGNED. Value of SIGNED could also be "XADES" or "CADES", that describe also type of signature. Attribute SIGNED is optional. If attachment is not signed the value can be absent or have value "NO".



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Example:

Invoice attachment with digital signature validation file as a separate file

Attachment is recognized to be validation file based on value "SIGNATURE_VALIDATION" of attribute TYPE. Attribute SOURCE describes creator of validation report.

Example:

Invoice attachment: Original invoice in different format as a separate file

Attachment is recognized to be original invoice based on value "INVOICE_DATA" of the attribute TYPE. Attribute SOURCE must have value "ORIGINAL". The attachment could also be digitally signed, if so that is told in attribute SIGNED.

Example:

Invoice attachment: Separate signature file

Attachment is recognized to be signature file based on value "SIGNATURE" of the attribute TYPE. If attribute SOURCE has value "ORIGINAL" signature file is created by payee. If attribute SOURCE has value "IC" signature file is created by einvoicing service provider.

Example:



4 Invoice information content

4.1 Invoice number

Invoice number is recommended to mainly consist of numbers. Letters can be used if needed. In credit notes original invoice number is located in element CREDIT_INVOICE_NUMBER.

4.2 Invoice types

HEADER/INVOICE_TYPE element identifies invoice type. Empty invoice documentation for TEAPPSXMLv.2.7.1 includes description for used types and their codes. INVOICE_TYPE-element controls Invoice header contents in visualization if it is not specifically set in HEADER/SUBJECT element.

4.2.1 Interest invoices and reminders

TEAPPSXML INVOICE/ROWS/ROW-structure includes specific INFORMATION_OF_OVERDUE_PAYMENTS-block that is used only for interest invoices (HEADER/INVOICE_TYPE=06 or 07) and reminders (HEADER/INVOICE_TYPE=09). For interest invoices basic style sheet visualize for only free text and default posting from invoice rows and this structure. For reminders also row sum-information will be visualized.

4.2.2 Credit card invoice

TEAPPSXML includes in HEADER-structure optional CREDIT_INFORMATION structure that can be applied for credit card invoices. This structure consists following elements:

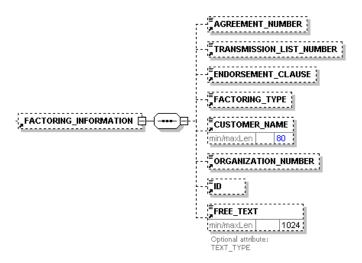
- CREDIT_LIMIT; amount of maximum credit
- INTEREST; used interest for credit
- OPERATION LIMIT; amount of credit limit available
- INSTALMENT; monthly instalment

Example:



4.2.3 Factoring invoice

TEAPPSXML includes in HEADER-structure optional FACTORING_INFORMATION structure that can be applied for factoring invoices.



Federation of Finnish Financial Services is published in www.finvoive.info – pages, in technical description of electronic invoice for companies, a guide for factoring invoice.

4.3 Invoice parties

In invoice level the following parties are available:

- INVOICE SENDER; invoice technical sender eg. account office; optional
- PAYEE; actual originator for invoice, one who get paid; mandatory
- SALES_CONTACT; sales organization; optional
- INVOICE_RECIPIENT; invoice technical receiver eg. account office; optional
- RECEIVER; actual receiver for the invoice; mandatory
- DELIVERER; delivering party; optional
- ORDERER; ordering party; optional
- DELIVERY_PARTY; customer to whom delivery happens; optional
- PAYER; party that pays the invoice; optional
- PAYOR; party to whom invoice will be redirected; optional
- MANUFACTURER; manufacturer of the invoiced goods; optional
- HOLDER; party that holds the delivered goods; optional
- OTHER PARTNER; any other partner; optional

In row-level there are available following optional structures: DELIVERY_RECEIVER and OTHER_PARTNER.

OTHER_PARTNER element has mandatory attributes PARTNER_TYPE and PARTNER_TEXT. These attributes defines partner. In default style sheet PARTNER_TEXT will be used to create partner title in layout. OTHER_PARTNER structure purpose is to



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support some industry specific requirements like in Insurance and it should be used only if there are no applicable partner definitions available.

Example

PARTNER_TYPE and PARTNER_TEXT content will be instructed by industry specific guides. These guides will be published when available in TEAPPSXML documentation in www.tieto.fi/laskuhotelli pages.

4.3.1 Identifiers

CUSTOMER_INFORMATION - structure contains own elements for

- business id: ORGANIZATION NUMBER
- vat number: VAT NUMBER
- edi identifier (ovt code): PARTY_IDENTIFICATION_ID

In TEAPPSXML v.2.7.2 usage of PARTY_IDENTIFICATION_ID –element is extended for needs of international elnvoices. PARTY_IDENTIFICATION_ID –element can occurs 0 – n times and it can have voluntary attribute AUTHORITY.

Examples

If only edi identifier is needed in TEAPPSXML –message, you can use PARTY_IDENTIFICATION_ID without attributes in the same way than in earlier TEAPPSXML-versions.

4.4 Order, Confirmation of Order, agreement-information

For invoice level order information there is HEADER/ORDER_INFORMATION structure that occurs 0-n times. The ORDER_INFORMATION-element has a attribute ORDER_TYPE, by which can order information be individualized. If order information is given by orderer then attribute value should be CO. If order information is given by supplier then attribute value should be VN. If order information is given by manufacturer then attribute value should be MH. Recommendation is to use ORDER_INFORMATION

structure to pass order information in invoice. Previous version HEADER-level ordernumber structure and INVOICE_ORDER_NUMBER should not be used any longer.

In TEAPPSXML has as a new ORDER_POSITION element in ORDER_INFORMATION structure. This element will be used to describe order position information. ORDER_TYPE attribute in ORDER_INFORMATION structure describes which party order position is handled.

TEAPPSXML has ORDER_INFORMATION structure also in row-level. Row-level structure should be used when order information varies in row level.

Example 1:

Example 2:

```
<ORDER_INFORMATION ORDER_TYPE="CO">
   <ORDER_NUMBER>333</ORDER_NUMBER>
   <ORDER DATE>
      <DATE>
          <DAY>17</DAY>
          <MONTH>08</MONTH>
          <CENTURY>20</CENTURY>
          <DECADE_AND_YEAR>05</DECADE_AND_YEAR>
      </DATE>
   </ORDER_DATE>
   <ORDER_REFERENCE>Maija/ORDER_REFERENCE>
</ORDER_INFORMATION>
<ORDER INFORMATION ORDER TYPE="VN">
   <ORDER_NUMBER>123456</ORDER_NUMBER>
   <ORDER_DATE>
      <DATE>
          <DAY>17</DAY>
          <MONTH>08</MONTH>
          <CENTURY>20</CENTURY>
          <DECADE AND YEAR>05</DECADE AND YEAR>
      </DATE>
   </ORDER DATE>
   <ORDER REFERENCE>654</ORDER REFERENCE>
</ORDER_INFORMATION>
```



4.5 Payment and posting information

4.5.1 Payment reference and bank accounts

In TEAPPSXML-message payment reference should be presented in "machine-readable" format without spaces. Also domestic account should be presented in "machine-readable" format without hyphen and with leading zeros according to instructions of the Federation of Finnish Financial Services. IBAN-account number should be presented in machine-readable format without spaces.

Default style sheets format payment reference and IBAN account number according general Finnish practice.

TEAPPSXML have separate element for bank account numbers (BANK_ACCOUNT_NUMBER) and IBAN account numbers (IBAN_ACCOUNT_NUMBER). It is not allowed to set IBAN-account number into BANK_ACCOUNT_NUMBER -element.

4.5.2 Payment term

Payment term should be presented in HEADER/TERMS_OF_PAYMENT -element.

Example:

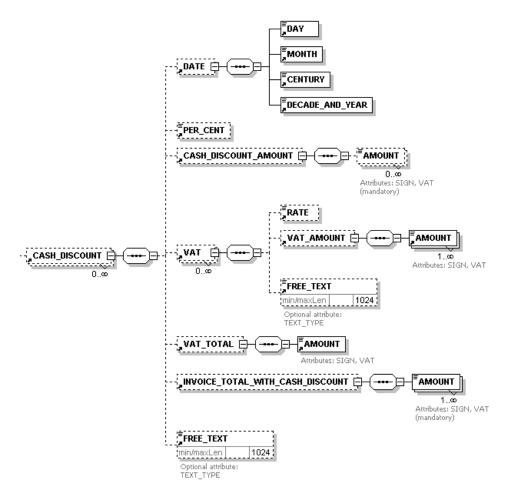
<TERMS_OF_PAYMENT>14 pv netto</TERMS_OF_PAYMENT>

4.5.3 Cash discount

Cash discount should be presented in INVOICE_CENTER/CONTENT_FRAME/INVOICES/INVOICE/HEADER/CASH_DISCOUNT -structure. This structure can occur 0 - n times.

CASH_DISCOUNT -structure is optional and if invoice does not include cash discounts the structure can be absent.





Cash discount presentation use following sub-structures:

DATE/ cash date

DAY date in format dd MONTH month in format mm CENTURY century in format cc

DECADE_AND_YEAR decade and year in format yy

PER_CENT discount per cent

no %-character, integer or at least 1 decimal

eg. <PER_CENT>2.00</PER_CENT>

CASH_DISCOUNT_AMOUNT/AMOUNT discount monetary amount

VAT/ RATE vat-per cent, no % character

VAT_AMOUNT/AMOUNT vat amount FREE_TEXT free text

VAT_TOTAL/AMOUNT vat amount for cash discounted price

INVOICE_TOTAL_WITH_CASH_DISCOUNT/AMOUNT invoice total sum including cash discount

FREE_TEXT free text



Example:

```
<TERMS_OF_PAYMENT>14pv -2%, 21pv -1%, 30pv netto</TERMS_OF_PAYMENT>
<CASH_DISCOUNT>
   <DATE>
      <DAY>11</DAY>
      <MONTH>03</MONTH>
      <CENTURY>20</CENTURY>
   <DECADE_AND_YEAR>04</DECADE_AND_YEAR>
   </DATF>
   <PER_CENT>2.00</PER_CENT>
   <CASH_DISCOUNT_AMOUNT>
      <AMOUNT SIGN="+" VAT="INCLUDED">129.97</AMOUNT>
      <AMOUNT SIGN="+" VAT="EXCLUDED">106.60</AMOUNT>
   </CASH_DISCOUNT_AMOUNT>
   <VAT>
      <RATE>22</RATE>
      <VAT_AMOUNT>
          <AMOUNT SIGN="+" VAT="EXCLUDED">23.37</AMOUNT>
      </VAT AMOUNT>
   </VAT>
   <VAT_TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">23.37</AMOUNT>
   </VAT_TOTAL>
   <INVOICE_TOTAL_WITH_CASH_DISCOUNT>
      <AMOUNT SIGN="+" VAT="EXCLUDED">5223.40</AMOUNT>
      <AMOUNT SIGN="+" VAT="INCLUDED">6368.43</AMOUNT>
   </INVOICE_TOTAL_WITH_CASH_DISCOUNT>
</CASH_DISCOUNT>
<CASH DISCOUNT>
   <DATE>
      <DAY>18</DAY>
      <MONTH>03</MONTH>
      <CENTURY>20</CENTURY>
      <DECADE_AND_YEAR>04</DECADE_AND_YEAR>
   </DATE>
   <PER CENT>1.00</PER CENT>
   <CASH_DISCOUNT_AMOUNT>
      <AMOUNT SIGN="+" VAT="INCLUDED">64.98</AMOUNT>
      <AMOUNT SIGN="+" VAT="EXCLUDED">53.30
   </CASH_DISCOUNT_AMOUNT>
   <VAT>
      <RATE>22</RATE>
      <VAT_AMOUNT>
          <AMOUNT SIGN="+" VAT="EXCLUDED">11.68</AMOUNT>
      </VAT_AMOUNT>
   </VAT>
   <VAT_TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">11.68</AMOUNT>
   </VAT_TOTAL>
   <INVOICE_TOTAL_WITH_CASH_DISCOUNT>
      <AMOUNT SIGN="+" VAT="EXCLUDED">5276.70</AMOUNT>
      <AMOUNT SIGN="+" VAT="INCLUDED">6433.42
   </INVOICE_TOTAL_WITH_CASH_DISCOUNT>
</CASH_DISCOUNT>
```

Net invoice layout for above example:

Maksuehdot

14pv -2%, 21pv -1%, 30pv netto



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Käteisalennus 2.00 %	11.03.2004	106,60	23,37	129,97	eur	6.368,43
			(22 % 23,37)			
Käteisalennus 1.00 %	18.03.2004	53,30	11,68	64,98	eur	6.433,42
			(22 % 11,68)			

Currency information will be picked-up into layout from INVOICE_CENTER/CONTENT_FRAME/INVOICES/INVOICE/HEADER/ CURRENCY/CODE —element. In layout also per cent character will be written and amount will be formatted according Finnish practice.

4.5.4 Default posting information from PAYEE

For posting information transfer suggestion is to use invoice level HEADER/PAYER_POSTING_GROUP_DEFAULTS –structure or for row level posting information ROW/DEFAULT_ROW_POSTING -structure. ACCOUNT and ACCOUNT_2 –elements consists accounts. ACCOUNT_AMOUNT/AMOUNT –element includes posted amount. DIMENSIONS/DIMENSION/LEVEL and DIMENSION_VALUE –group will include accounting objects. DIMENSION_NAME -element can further specify applied accounting object. ACCOUNT_AMOUNT/AMOUNT –element has attributes SIGN and VAT.

Even if DIMENSION_VALUE does not include value for certain level the LEVEL-element have to include accounting object order number.

Example 1:

```
<PAYER_POSTING_GROUP_DEFAULTS>
   <POSTING_DEFAULT>
      <ACCOUNT>4000</ACCOUNT>
      <ACCOUNT_AMOUNT>
      <AMOUNT SIGN="+" VAT="INCLUDED">100.00</AMOUNT>
      </ACCOUNT AMOUNT>
      <DIMENSIONS>
          <DIMENSION>
             <LEVEL>1</LEVEL>
             <DIMENSION_VALUE>100/DIMENSION_VALUE>
          </DIMENSION>
          <DIMENSION>
             <LEVEL>2</LEVEL>
             <DIMENSION_VALUE/>
          </DIMENSION>
          <DIMENSION>
             <LEVEL>3</LEVEL>
             <DIMENSION_VALUE>6</DIMENSION_VALUE>
          </DIMENSION>
      </DIMENSIONS>
   </POSTING DEFAULT>
</PAYER_POSTING_GROUP_DEFAULTS>
```

Example 2:

```
<PAYER_POSTING_GROUP_DEFAULTS>
  <POSTING_DEFAULT>
  <ACCOUNT>4200</ACCOUNT>
```



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```
<ACCOUNT_AMOUNT>
            <AMOUNT SIGN="+" VAT="INCLUDED">500.00</AMOUNT>
        </ACCOUNT AMOUNT>
        <DIMENSIONS>
            <DIMENSION>
               <LEVEL>1</LEVEL>
               <DIMENSION_VALUE>804/DIMENSION_VALUE>
            </DIMENSION>
        </DIMENSIONS>
     </POSTING DEFAULT>
     <POSTING_DEFAULT>
        <ACCOUNT>4200</ACCOUNT>
        <ACCOUNT_AMOUNT>
            <AMOUNT SIGN="+" VAT="INCLUDED">1500.00</AMOUNT>
        </ACCOUNT_AMOUNT>
        <DIMENSIONS>
            <DIMENSION>
               <LEVEL>1</LEVEL>
               <DIMENSION_VALUE>805/DIMENSION_VALUE>
            </DIMENSION>
        </DIMENSIONS>
     </POSTING_DEFAULT>
  </PAYER_POSTING_GROUP_DEFAULTS>
Example 3:
  <DEFAULT ROW POSTING>
     <CREDIT_ACCOUNT>667030</CREDIT_ACCOUNT>
     <DIMENSIONS>
         <DIMENSION>
            <LEVEL>01</LEVEL>
            <DIMENSION_VALUE>1130/DIMENSION_VALUE>
        </DIMENSION>
     </DIMENSIONS>
  </DEFAULT_ROW_POSTING>
Example 4:
  <DEFAULT_ROW_POSTING>
     <DIMENSIONS>
        <DIMENSION>
            <LEVEL>02</LEVEL>
            <DIMENSION_VALUE>002/DIMENSION_VALUE>
        </DIMENSION>
        <DIMENSION>
            <LEVEL>03</LEVEL>
            <DIMENSION_VALUE>S05369/DIMENSION_VALUE>
        </DIMENSION>
        <DIMENSION>
            <LEVEL>04</LEVEL>
            <DIMENSION_VALUE>T26735/DIMENSION_VALUE>
        </DIMENSION>
        <DIMENSION>
            <LEVEL>05</LEVEL>
            <DIMENSION_VALUE>1
        </DIMENSION>
        <DIMENSION>
            <LEVEL>06</LEVEL>
            <DIMENSION_VALUE>1
        </DIMENSION>
```



</dimensions>
</default_row_posting>

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Optionally default posting information given by receiver can be delivered in ACCOUNT_REFERENCE -element on header or item level defined by Fully Integrated Accounting (FIA) –project of Real Time Economy program:

- HEADER/PAYER_POSTING_GROUP_DEFAULTS/POSTING_DEFAULT/ ACCOUNT_REFERENCE
- ROWS/ROW/DEFAULT_ROW_POSTING/ACCOUNT_REFERENCE

Posting information in ACCOUNT_REFERENCE –element consists of posting information defined by receiver without separator characters (i.e. account, site, cost centre, unit etc.). Posting information include also REPORTING_CODE –element for receiver's reporting needs. REPORTING_CODE is defined in FIA-project (Fully Integrated Accounting –project) in Finland. Reporting codes are maintained by the Reporting Committee which will be established in the Institute for Accountancy.

If same accounting reference and/or reporting code cover all invoices, these should enter into the invoice level. If accounting reference and/or reporting code alternate between invoice rows, these should enter into the row level.

The following examples show value 42006440400 as account reference. 4200 is purchase account, 6440 is cost pool and 400 is department. Additionally as reporting code is shown 4000.

Example 1: account reference and reporting code on header level

Example 2: account reference and reporting code on item level

```
<DEFAULT_ROW_POSTING>
     <ACCOUNT_REFERENCE>42006440400</ACCOUNT_REFERENCE>
     <REPORTING_CODE>4000</REPORTING_CODE>
</DEFAULT_ROW_POSTING>
```

For posting information we recommend to use account reference.

4.6 Other invoice level information

4.6.1 Deliverer number

Deliverer number is the identifier given by receiver to the deliverer. Passing this identifier use element INVOICE/PAYEE/CUSTOMER INFORMATION/CUSTOMER ID.

4.6.2 Receiver email-address

Use either element to transfer receiver email address:



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- INVOICE/RECEIVER/CUSTOMER_INFORMATION/CONTACT_INFORMATION/E-MAIL ADDRESS or
- INVOICE/RECEIVER/CUSTOMER_INFORMATION/E-MAIL_ADDRESS

If receiver use a workflow system that requires receiver's email address to find correct content inspector use

INVOICE/RECEIVER/CUSTOMER_INFORMATION/CONTACT_INFORMATION/E-MAIL_ADDRESS element to pass this required information.

4.6.3 Payment instruction

In electronic consumer invoicing payment instruction code is mandatory information. This identifier is defined by sender. This identifier is used when payee has agreed on Finvoice intermediation service agreement and payee is sending electronic invoices via net banks to receiving consumer and business customers.

Payment instrucion code is delivered to banks using SenderInfo. Payment instrucion code has to be on invoice as well. Finvoice message shows payment instruction code in EpiPaymentInstructionID field which is optional field. In TEAPPSXML this is located in HEADER/PAYMENT_INSTRUCTION_IDENTIFIER. During transition also element HEADER/PAYMENT_SUBJECT_CODE can be used if payment instruction code has maximum of three characters.

Additional information regarding electronic consumer invoicing and related Notification Service is available at the Federation of Finnish Financial Services web site.

4.6.4 Order confirmation and contract information

HEADER -structure includes optional elements to present invoice level order confirmation and contract information.

For order confirmation there is ORDER_CONFIRMATION –structure that consists elements for order confirmation number and date.

For contract information there is CONTRACT INFORMATION –structure that consists subelements for contract number, date, contract period and price list.

Example:



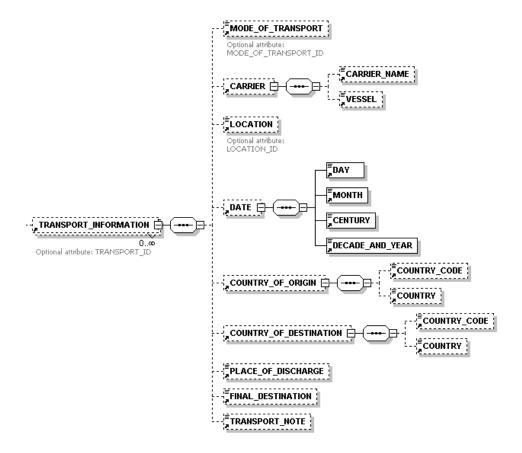
```
<CONTRACT_NUMBER>Contract XXX</CONTRACT_NUMBER>
   <CONTRACT_DATE>
       <DATE>
          <DAY>17</DAY>
          <MONTH>12</MONTH>
          <CENTURY>20</CENTURY>
          <DECADE_AND_YEAR>05</DECADE_AND_YEAR>
      </DATE>
   </CONTRACT DATE>
   <CONTRACT PERIOD>
      <START_PERIOD>
          <DATE>
             <DAY>01</DAY>
             <MONTH>01</MONTH>
             <CENTURY>20</CENTURY>
             <DECADE_AND_YEAR>05</DECADE_AND_YEAR>
          </DATE>
      </START_PERIOD>
      <END PERIOD>
          <DATE>
             <DAY>01</DAY>
             <MONTH>12</MONTH>
             <CENTURY>20</CENTURY>
             <DECADE_AND_YEAR>05</DECADE_AND_YEAR>
          </DATE>
      </END PERIOD>
   </CONTRACT PERIOD>
   <PRICELIST>Price list 1/2005</PRICELIST>
</CONTRACT INFORMATION>
```

4.6.5 Transport information

Under the HEADER-structure can the invoice-specific transport information entered in voluntary TRANSPORT_INFORMATION-structure. The structure can occur 0 – n times. By using a voluntary attribute TRANSPORT_ID of TRANSPORT_INFORMATION –element can main carrier dissociated from post-carrier. TRANSPORT_INFORMATION-structure consists of the following child-elements:

- MODE_OF_TRANSPORT, transport mode
 MODE_OF_TRANSPORT has a voluntary attribute
 MODE_OF_TRANSPORT_ID, which expresses the code value of the
 transport mode
- CARRIER/CARRIER_NAME, the name of carrier/transport company
- CARRIER/VESSEL, the identifier of vessel, for example registration number
- LOCATION, loading/unloading/frontier crossing point
 - By using a voluntary attribute LOCATION_ID of LOCATION-element, can the value of element specified.
- DATE, relates to LOCATION-information
- COUNTRY_OF_ORIGIN/COUNTRY_CODE, code of origin country
- COUNRY_OF_ORIGIN/COUNTRY, name of the origin country
- COUNTRY_OF_DESTINATION/COUNTRY_CODE, code of destination country
- COUNRY OF DESTINATION/COUNTRY, name of the destination country
- PLACE OF DISCHARGE, place of discharging
- FINAL_DESTINATION, final delivery destination
- TRANSPORT_NOTE, information relating to transport, for example the number of bill of carriage

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4.6.6 Additional information regarding the invoice - HEADER_INFO

The values of the INVOICE_CENTER/CONTENT_FRAME/INVOICES/INVOICE/HEADER_INFO/SERIAL_ID element are used to indicate the order of the additional information. Consecutive numbering with two digits is used to indicate the value of the element, in other words 01, 02, 03, 04, etc. The TITLE element shows the title of the additional information and the CONTENT element shows its content.

TITLE-element has an attribute INFO_TYPE. Using this attribute and TITLE element it is possible to use industry specific recommendations in invoice additional information. Content of INFO_TYPE attribute depends on those industry specific recommendations and will be published in TEAPPSXML documentation in www.tieto.fi/laskuhotelli pages when available.

Example 1:



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```
<TITLE>Invoicing group</TITLE>
<CONTENT>001</CONTENT>
</HEADER_INFO>

Example 2:

<HEADER_INFO>
<SERIAL_ID>01</SERIAL_ID>
<TITLE INFO_TYPE="101001">Down Time</TITLE>
<CONTENT>3</CONTENT>
</HEADER_INFO>
```

If HEADER_INFO/CONTENT -element contains date, format is DD.MM.CCYY.

4.6.7 EpiDetails

TEAPPSXML includes also as not mandatory structure EpiDetails specification from Finvoice-specification. This structure has been added as is without any changes.

4.7 Row level information

4.7.1 Product information

Besides the article name, product information can consist some additional data of product. In addition of the elements product number and article name are available delivery date of product, characteristics of product and free information text elements.

In TEAPPSXML it is possible to present following new product information:

- EAN CODE; product EAN code
- SUPPLIER_ARTICLE_ID; product number given by supplier
- MANUFACTURER ARTICLE ID; product number given by manufacturer
- SERIAL NUMBER; product serial number
- PRODUCT_GROUP; product group information
- LOT/LOT_NUMBER and LOT/LOT_DESCRIPTION; product batch information

Example:

```
<ARTICLE>
   <ARTICLE ID>1012/ARTICLE ID>
   <ARTICLE_NAME>PRODUCT 1012</ARTICLE_NAME>
   <DELIVERY_DATE>
       <DATE>
          <DAY>31</DAY>
          <MONTH>10</MONTH>
          <CENTURY>20</CENTURY>
          <DECADE_AND_YEAR>02</DECADE_AND_YEAR>
       </DATE>
   </DELIVERY DATE>
   <FREE TEXT>Special Product/FREE TEXT>
   <ARTICLE_DESCRIPTIONS>
       <article_description>
          <DESCRIPTION TYPE DESCRIPTION ID="TH">Thickness</DESCRIPTION TYPE>
          <DESCRIPTION_VALUE>5.000</DESCRIPTION_VALUE>
          <DESCRIPTION_UNIT>mm</DESCRIPTION_UNIT>
       </ARTICLE DESCRIPTION>
```



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If industry specific information has to presented on row level (eg. lay day, serial number) instead of invoice level HEADER_INFO then they should be presented on ARTICLE_DESCRIPTION structure. DESCRIPTION_ID attribute content depends on industry instructions. These instructions will be published in TEAPPSXML documentation www.tieto.fi/laskuhotelli when available.

Example:

4.7.2 Different delivery and pricing units on a row level

Some invoices, such as telephone and electric bills, require different units for the processing of row-level information. To deal with this requirement, the TEAPPSXML description is a PR_UNIT attribute of the PRICE_PER_UNIT element, which expresses the pricing unit, and a Q_UNIT attribute for the QUANTITY/OFFERED, ORDERED, DELIVERED and CHARGED elements, which expresses the delivery unit.

Example 1: A row on an electric bill

	PERIOD	QUANTITY	UNIT PRICE	TOTAL
			INCL. VAT	
Fee for consumption	03.03.2000 - 06.03.2001	5200 kWh	15.0 p/month	780.00



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Example 2: Telephone bill

```
<QUANTITY>

<CHARGED SIGN="+" Q_UNIT="pcs">12</CHARGED>

<CHARGED SIGN="+" Q_UNIT="min.s">53.11</CHARGED>

</QUANTITY>
```

Example 3: Quantity refunded – 5 pcs, unit price 20.00 p/piece

We recommend that the Q_UNIT attribute be used for indicating delivery units and the PR_UNIT attribute for pricing units.

4.7.3 Row prices and row totals

On item level unit price is presented in element PRICE_PER_UNIT. ROW_AMOUNT/AMOUNT element on item level presents row's gross value. ROW_TOTAL/AMOUNT element presents row's payable sum (net value). Each row sum has attributes VAT and SIGN in order to tell whether or not tax is included and if sum is positive or negative.



4.7.4 Discounts

It is possible to classify discounts in row level using optional TYPE attribute. Possible type codes are: 00=normal discount/product discount, 01=cash discount, 02=contract discount. If TYPE attribute is not used then discount will be regarded as normal discount type. Especially when receiver request discount classification it is recommended to use TYPE attribute.

Example 1:

Example 2:

SUMMARY-structure has same kind of DISCOUNT-structure. However, discounts have to be presented in Invoice or row levels. Possible invoice level cash discount should be presented in HEADER/CASH_DISCOUNT -structure.

4.7.5 Row-specific addition or subtraction ROW CHARGE

For row-specific additions and subtractions a ROW_CHARGE element structure is introduced in the ROW structure. We recommend that this structure be used for reporting any row-specific additions or subtractions.

Example 1:



Example 2:

```
<ROW_CHARGE>
  <CHARGE_NAME>Special delivery charge</CHARGE_NAME>
  <CHARGE_AMOUNT>
       <AMOUNT SIGN="+" VAT="INCLUDED">150.00</AMOUNT>
  </CHARGE_AMOUNT>
</ROW_CHARGE>
```

4.7.6 Grouping of invoice rows using the ROW_TYPE and ROW_ID attributes

The ROW element consists of optional attributes ROW_TYPE and ROW_ID, which are used for example in joint invoices, with combination invoices or situations, when subtotal information is needed. The ROW_TYPE attribute indicates the row type, which may be MAIN (= header row), SPECIFICATION (= specification row) or SUBTOTAL (= subtotal row). ROW_ID is used for grouping the rows, and it is closely connected to the ROW_TYPE attribute. On a normal sales invoice, the ROW_TYPE and ROW_ID attributes need not be used. But if invoice include subtotals, those have to tell with ROW_TYPE SUBTOTAL.

There is new value in TEAPPSXML v.2.7 for ROW_TYPE attribute. When using value @ROW_TYPE="INFO" that sum is not calculated into invoice inspection sums.

When calculating sums from rows having @ROW_TYPE="SPECIFICATION" (ROW_TOTAL/AMOUNT elements including tax) result should be same as present in SUMMARY/INVOICE_TOTAL/AMOUNT including tax. If SUMMARY structure includes freight, billing charge etc. information then row level calculated sum should be same as presented in SUMMARY/ROWS_TOTAL/AMOUNT including tax.

```
<ROW ROW_TYPE="MAIN" ROW_ID="1">
                                                           1st header row of ROW_ID 1
</ROW>
<ROW ROW_TYPE="SPECIFICATION" ROW_ID="1">
                                                          1st specification row of ROW_ID 1
</ROW>
<ROW ROW_TYPE="SPECIFICATION" ROW_ID="1">
                                                          2nd specification row of ROW_ID 1
</ROW>
<ROW ROW_TYPE="SUBTOTAL" ROW_ID="1">
                                                          Subtotal (ROW_ID 1 total), can exist more times
</ROW>
<ROW ROW_TYPE="MAIN" ROW_ID="2">
                                                          2nd header row of ROW_ID 2
<ROW ROW_TYPE="SPECIFICATION" ROW_ID="2">
                                                          1st specification row of ROW_ID 2
</ROW>
<ROW ROW_TYPE="SPECIFICATION" ROW_ID="2">
                                                          2nd specification row of ROW_ID 2
<ROW ROW_TYPE="SUBTOTAL" ROW_ID="2">
                                                          Subtotal (ROW_ID 2 total)
</ROW>
```



150.00

200.00

350.00

100.00

88.00

188.00

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Example 1:

```
SUBSCRIPTION NUMBER 123456
Telephone calls
Text messages
Total
SUBSCRIPTION NUMBER 123457
Telephone calls
Text messages
Total
 <ROWS>
     <ROW ROW TYPE="MAIN" ROW ID="1">
        <ARTICLE>
           <ARTICLE_NAME>SUBSCRIPTION NUMBER 123456</ARTICLE_NAME>
        </ARTICLE>
     </ROW>
    <ROW ROW_TYPE="SPECIFICATION" ROW_ID="1">
        <ARTICLE>
           <ARTICLE_NAME>Telephone calls/ARTICLE_NAME>
        </ARTICLE>
        <ROW_TOTAL>
           <AMOUNT SIGN="+" VAT="INCLUDED">150.00</AMOUNT>
        </ROW_TOTAL>
    </ROW>
     <ROW ROW TYPE="SPECIFICATION" ROW ID="1">
        <ARTICLE>
           <ARTICLE_NAME>Text messages
        </ARTICLE>
        <ROW_TOTAL>
           <AMOUNT SIGN="+" VAT="INCLUDED">200.00</AMOUNT>
        </ROW_TOTAL>
    </ROW>
    <ROW ROW_TYPE="SUBTOTAL" ROW_ID="1">
        <ARTICLE>
           <ARTICLE NAME>Total</ARTICLE NAME>
        </ARTICLE>
        <ROW_TOTAL>
           <AMOUNT SIGN="+" VAT="INCLUDED">350.00
        </ROW_TOTAL>
     </ROW>
     <ROW ROW_TYPE="MAIN" ROW_ID="2">
        <ARTICLE>
           <ARTICLE_NAME>SUBSCRIPTION NUMBER 123457</ARTICLE_NAME>
        </ARTICLE>
    </ROW>
     <ROW ROW_TYPE="SPECIFICATION" ROW_ID="2">
        <ARTICLE>
           <ARTICLE_NAME>Telephone calls/ARTICLE_NAME>
        </ARTICLE>
        <ROW_TOTAL>
           <AMOUNT SIGN="+" VAT="INCLUDED">100.00</AMOUNT>
        </ROW_TOTAL>
    </ROW>
     <ROW ROW TYPE="SPECIFICATION" ROW ID="2">
        <ARTICLE>
           <ARTICLE_NAME>Text messages
        </ARTICLE>
        <ROW_TOTAL>
           <AMOUNT SIGN="+" VAT="INCLUDED">88.00</AMOUNT>
        </ROW_TOTAL>
     <ROW ROW_TYPE="SUBTOTAL" ROW_ID="2">
```



Example 2:

```
<ROWS>
   <ROW ROW_TYPE="MAIN" ROW_ID="1">
       <ARTICLE>
          <ARTICLE_NAME>Delivery 1</ARTICLE_NAME>
       </ARTICLE>
   </ROW>
   <ROW ROW_TYPE="SPECIFICATION" ROW_ID="1">
          <ARTICLE_NAME>Service package 1</ARTICLE_NAME>
       </ARTICLE>
       <ROW_TOTAL>
          <AMOUNT SIGN="+" VAT="EXCLUDED">6550.00</AMOUNT>
       </ROW_TOTAL>
       <VAT>
          <RATE>22.00</RATE>
       </VAT>
   </ROW>
   <ROW ROW_TYPE="SPECIFICATION" ROW_ID="1">
          <ARTICLE_NAME>Service package 3</ARTICLE_NAME>
       </ARTICLE>
       <ROW_TOTAL>
          <AMOUNT SIGN="+" VAT="EXCLUDED">1650.00</AMOUNT>
       </ROW_TOTAL>
       <VAT>
          <RATE>22.00</RATE>
       </VAT>
   </ROW>
   <ROW ROW_TYPE="INFO" ROW_ID="1">
          <ARTICLE_NAME>Tasks together</ARTICLE_NAME>
       </ARTICLE>
       <ROW_TOTAL>
          <AMOUNT SIGN="+" VAT="EXCLUDED">8200.00</AMOUNT>
       </ROW_TOTAL>
   </ROW>
   <ROW ROW_TYPE="SPECIFICATION" ROW_ID="1">
       <ARTICLE>
          <ARTICLE_NAME>Travelling expenses</ARTICLE_NAME>
       </ARTICLE>
       <ROW_TOTAL>
          <AMOUNT SIGN="+" VAT="EXCLUDED">368.85/AMOUNT>
       </ROW_TOTAL>
       <VAT>
          <RATE>22.00</RATE>
      </VAT>
   </ROW>
   <ROW ROW_TYPE="INFO" ROW_ID="1">
          <ARTICLE_NAME>Travelling expenses together</ARTICLE_NAME>
       </ARTICLE>
       <ROW_TOTAL>
          <AMOUNT SIGN="+" VAT="EXCLUDED">368.85/AMOUNT>
```



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```
</ROW_TOTAL>
</ROW>
<ROW ROW TYPE="SUBTOTAL" ROW ID="1">
       <ARTICLE_NAME>Delivery 1 subtotal
   </ARTICLE>
   <ROW_TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">8568.85</AMOUNT>
       <AMOUNT SIGN="+" VAT="INCLUDED">10454.00</AMOUNT>
   </ROW TOTAL>
   <VAT>
      <RATE>22.00</RATE>
       <VAT_AMOUNT>
         <AMOUNT SIGN="+" VAT="EXCLUDED">1885.15</AMOUNT>
      </VAT_AMOUNT>
   </VAT>
</ROW>
<ROW ROW_TYPE="MAIN" ROW_ID="2">
       <ARTICLE_NAME>Delivery 2</ARTICLE_NAME>
   </ARTICLE>
</ROW>
<ROW ROW_TYPE="SPECIFICATION" ROW_ID="2">
   <ARTICLE>
      <ARTICLE_NAME>Service package 10</ARTICLE_NAME>
   </ARTICLE>
   <ROW_TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">6550.00</AMOUNT>
   </ROW_TOTAL>
   <VAT>
       <RATE>22.00</RATE>
   </VAT>
</ROW>
<ROW ROW_TYPE="SPECIFICATION" ROW_ID="2">
   <ARTICLE>
      <ARTICLE_NAME>Extra work</ARTICLE_NAME>
   </ARTICLE>
   <ROW TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">1650.00</AMOUNT>
   </ROW_TOTAL>
   <VAT>
      <RATE>22.00</RATE>
   </VAT>
</ROW>
<ROW ROW_TYPE="INFO" ROW_ID="2">
   <ARTICLE>
       <ARTICLE_NAME>Tasks together</ARTICLE_NAME>
   </ARTICLE>
   <ROW TOTAL>
       <AMOUNT SIGN="+" VAT="EXCLUDED">8200.00</AMOUNT>
   </ROW_TOTAL>
</ROW>
<ROW ROW_TYPE="SPECIFICATION" ROW_ID="2">
   <ARTICLE>
      <ARTICLE_NAME>Travelling expenses
   </ARTICLE>
   <ROW_TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">368.85</AMOUNT>
   </ROW_TOTAL>
   <VAT>
      <RATE>22.00</RATE>
   </VAT>
</ROW>
<ROW ROW_TYPE="INFO" ROW_ID="2">
   <ARTICLE>
       <ARTICLE_NAME>Travelling expenses together</ARTICLE_NAME>
```



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```
</ARTICLE>
      <ROW TOTAL>
         <AMOUNT SIGN="+" VAT="EXCLUDED">368.85</AMOUNT>
      </ROW TOTAL>
   </ROW>
   <ROW ROW TYPE="SUBTOTAL" ROW ID="2">
      <ARTICLE>
         <ARTICLE_NAME>Delivery 2 subtotal
      </ARTICLE>
      <ROW TOTAL>
         <AMOUNT SIGN="+" VAT="EXCLUDED">8568.85</AMOUNT>
         <AMOUNT SIGN="+" VAT="INCLUDED">10454.00</AMOUNT>
      <VAT>
         <RATE>22.00</RATE>
         <VAT AMOUNT>
            <AMOUNT SIGN="+" VAT="EXCLUDED">1885.15
         </VAT_AMOUNT>
      </VAT>
   </ROW>
</ROWS>
```

4.8 Summary level information

4.8.1 Invoice total, INVOICE TOTAL

Invoice total excluding taxes is presented in element INVOICE_TOTAL/AMOUNT using value "EXCLUDED" in attribute VAT. Invoice total including taxes is presented in element INVOICE_TOTAL/AMOUNT using value "INCLUDED" in attribute VAT.

In credit note at least INVOICE_TOTAL is negative having value "-" in attribute SIGN. This enables receiving systems to handle invoice correctly.

Example:

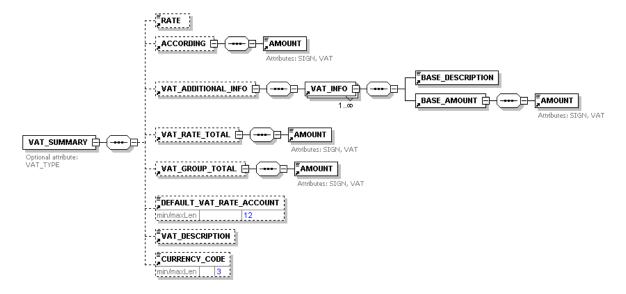
```
<INVOICE_TOTAL>
<AMOUNT SIGN="+" VAT="INCLUDED">50752.00</AMOUNT>
<AMOUNT SIGN="+" VAT="EXCLUDED">41600.00</AMOUNT>
</INVOICE_TOTAL>
```

4.8.2 Value added tax information of invoice, SUMMARY/VAT_SUMMARY

The VAT_SUMMARY-element has an optional attribute VAT_TYPE, which specifies the interpretation of value added tax. In addition VAT_SUMMARY-structure has an element VAT_DESCRIPTION, on which additional information of value added tax can added as text format and CURRENCY_CODE, on which the currency of value added tax can specified, if it diverges from the currency of invoice. With VAT_SUMMARY/VAT_ADDITIONAL_INFO structure it is possible to specify and divide or direct the basis of assessment.



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Example:

```
<VAT SUMMARY>
   <RATE>0.00</RATE>
   <ACCORDING>
      <AMOUNT SIGN="+" VAT="EXCLUDED">0.15</AMOUNT>
   </ACCORDING>
   <VAT_ADDITIONAL_INFO>
      <VAT_INFO>
          <BASE_DESCRIPTION>Vakuutus</BASE_DESCRIPTION>
          <BASE_AMOUNT>
            <AMOUNT>0.15</AMOUNT>
          </BASE AMOUNT>
      </VAT_INFO>
   </VAT_ADDITIONAL_INFO>
   <VAT RATE TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">0.00</AMOUNT>
   </VAT_RATE_TOTAL>
   <VAT_GROUP_TOTAL>
      <AMOUNT SIGN="+" VAT="INCLUDED">0.15</AMOUNT>
   </VAT_GROUP_TOTAL>
   <VAT_DESCRIPTION>Vakuutus</VAT_DESCRIPTION>
</VAT_SUMMARY>
<VAT_SUMMARY>
   <RATE>8.00</RATE>
   <ACCORDING>
      <AMOUNT SIGN="+" VAT="EXCLUDED">1.34</AMOUNT>
   </ACCORDING>
   <VAT_ADDITIONAL_INFO>
      <VAT_INFO>
          <BASE_DESCRIPTION>Tavarat</BASE_DESCRIPTION>
          <BASE AMOUNT>
            <AMOUNT>1.34</AMOUNT>
          </BASE_AMOUNT>
      </VAT_INFO>
      <VAT_INFO>
          <BASE_DESCRIPTION>Toimitusmaksut</BASE_DESCRIPTION>
          <BASE_AMOUNT>
            <AMOUNT>0.00</AMOUNT>
          </BASE_AMOUNT>
      </VAT_INFO>
   </VAT_ADDITIONAL_INFO>
   <VAT_RATE_TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">0.10</AMOUNT>
```



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```
</VAT_RATE_TOTAL>
   <VAT_GROUP_TOTAL>
      <AMOUNT SIGN="+" VAT="INCLUDED">1.44</AMOUNT>
   </VAT GROUP TOTAL>
   <VAT_DESCRIPTION>Tavarat+toim.maksut yhteensä</VAT_DESCRIPTION>
</VAT SUMMARY>
<VAT_SUMMARY>
   <RATE>22.00</RATE>
   <ACCORDING>
      <AMOUNT SIGN="+" VAT="EXCLUDED">82.19</AMOUNT>
   </ACCORDING>
   <VAT_ADDITIONAL_INFO>
      <VAT_INFO>
          <BASE_DESCRIPTION>Tavarat</BASE_DESCRIPTION>
          <BASE_AMOUNT>
            <AMOUNT>65.19</AMOUNT>
          </BASE_AMOUNT>
      </VAT_INFO>
       <VAT_INFO>
          <BASE_DESCRIPTION>Toimitusmaksut</BASE_DESCRIPTION>
          <BASE_AMOUNT>
            <AMOUNT>17.00</AMOUNT>
          </BASE_AMOUNT>
      </VAT_INFO>
   </VAT_ADDITIONAL_INFO>
   <VAT RATE TOTAL>
      <AMOUNT SIGN="+" VAT="EXCLUDED">18.08</AMOUNT>
   </VAT_RATE_TOTAL>
   <VAT GROUP TOTAL>
      <AMOUNT SIGN="+" VAT="INCLUDED">100.27</AMOUNT>
   </VAT_GROUP_TOTAL>
   <VAT_DESCRIPTION>Tavarat+toim.maksut yhteensä</VAT_DESCRIPTION>
</VAT_SUMMARY>
```

In net invoice layout previous structure will be presented as follows:

ALV	Peruste	%	Summa	Yhteensä
Vakuutus	0,15	0.00 %	0,00	0,15
Vakuutus	0,15			
Tavarat+toim.maksut yhteensä	1,34	8.00 %	0,10	1,44
Tavarat	1,34			
Toimitusmaksut	0,00			
Tavarat+toim.maksut yhteensä	82,19	22.00 %	18,08	100,27
Tavarat	65,19			
Toimitusmaksut	17,00			
		ALV y	hteensä 18,18	

Basis of assessment is possible to present in invoice at VAT_SUMMARY/ VAT_DESCRIPTION element. In breakdown rows basis of assessment can be presented in ROW/VAT/FREE_TEXT element. Reference information to applied VAT legislation can be presented in HEADER/VAT_TEXT element.

4.8.3 Invoice VAT

Whole vat for total invoice should be presented in SUMMARY/VAT_TOTAL/AMOUNT element. Suggestion is to present always both VAT specification and total VAT, because this information is important for receiver for further processing.



4.9 VAT reverse charge

If invoice or part of invoice belongs to reverse charge –processing, you can tell it with vat code and/or vat description. TEAPPSXML v.2.7.2 have new voluntary attribute, VAT_TYPE, in ROW/VAT-structure for vat code. Same attribute is already in SUMMARY/VAT_SUMMARY-structure.

VAT_TYPE attribute is used to summarize different VAT-types especially when amounts on invoice consist of several different VAT bases that are exempt from taxation. If VAT_TYPE is missing, ROW/VAT/RATE is used to make the summary, as before.

Recommendation is to use same vat codes than in EDI INVOIC -messages. Next code list based on EDI-descriptions and is gathered in co-ordination with Tieke, Federation of Finnish Financial Services and Tieto.

Vat codes	Description
AB	Exempt for resale
AE	VAT Reverse Charge
Е	Exempt from tax
G	Free export item, tax not charged
0	Services outside scope of tax
S	Standard rate
Z	Zero rated goods
ZEG	Tax charged from goods bought from other EU countries
ZES	Tax charged from services bought from other EU countries

Reference to vat law can be in

- invoice level in HEADER/VAT_TEXT -element
- row level in ROW/VAT/FREE_TEXT -element
- vat specification in SUMMARY/VAT_SUMMARY/VAT_DESCRIPTION -element

Next possible example contains vat codes with all different vat rates.



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