FINVOICE IMPLEMENTATION GUIDELINES

Version 2.01

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FFI | Federation of Finnish Financial Services

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Version update

16 May 2012	2.0 draft
23 May 2012	Added schematics, SOAP and ACK examples
4 October 2012	Final version. Text added e.g. attachment models.
5. November 2012	Erratum: 1 Mb --> 1 MB
12. June 2013	Finvoice 2.01 EpiPaymentInstructionId element allows spaces Changed elements optional: VatSpecificationDetalis - VatBaseAmout - VatRateProsent - VatRateAmount under PartialPayment

	- PaidVatExcludedAmount - UnPaidVatExcludedAmount added examples
10. October	Erratum: 19.9 Attachment message model example
25.October 2015	update the Finvoice forwarding service Intermediator codes
25 September 2024	Erratum: namespace and schemalocation in FinvoiceAck examples

1. What is Finvoice?

The Finvoice message can be used for invoicing and for other business messages, such as quotations, orders, order confirmations, price lists, etc. Due to easy adoption, it is suitable for invoicing between companies of all sizes and for consumer invoicing.

Finvoice is defined using XML syntax. XML enables the invoice to be represented both in a form understood by the application and, using a browser, in a form corresponding to a paper invoice. The browser representation of an invoice may be printed as a hard copy and processed in the traditional way.

The first version of the Finvoice message was released in 2003, version 1.1 in 2004, and version 1.2 at the beginning of 2005. Finvoice versions are backwards compatible. Maximum field lengths were not specified in Finvoice 1.1. They are specified as of version 1.2.

Version 1.3 of the Finvoice message was released in 2008. The version's main changes are described in implementation guidelines 1.3.

This 2.0 version was released in early 2012. Banks will implement it in accordance with their own schedules, but for direct payment implementation must be carried out by January 2013 at the latest. The fundamental changes in version 2.0 pertain to the introduction of a new service, direct payment, as well as to the transmission of attachments in the Finvoice forwarding service. Verify from your service provider whether version 2.0 is supported.

Version 2.01 has been cleryfied data fields in VatSpecificationDetails and Partial Payment.

2. General description of the Finvoice forwarding service

The Finvoice electronic invoice implementation guidelines and the DTD, XSD, and XSL files required for formal verification of the invoices are freely available on the Website of the Federation of Finnish Financial Services at www.finvoice.info.

The terms used in these implementation guidelines are defined in the document "Description and Terms and Conditions of the Finvoice Forwarding Service".

All Finvoice versions must validate with the Finvoice schema. Software Provider is responsible for ensuring that the software makes schema valid e-invoices. The service providers will validate version 1.3 against schema and invoice must have a reference to the xsd.

Version 1.2:
`<!DOCTYPE Finvoice SYSTEM "Finvoice.dtd">`

Version 1.3:
```
 <Finvoice Version="1.3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="Finvoice.xsd">
```

Version 2.0:
```
<Finvoice Version="2.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="Finvoice.xsd">
```

Version 2.01
<Finvoice Version="2.01" xmlns:xsi=http://www.w3.org/2001/XMLSchema-instance
xsi:noNamespaceSchemaLocation="Finvoice2.01.xsd">

1.3 and 2. versions reject material that is incompatible with the schema.

Finvoice and e-invoice are trademarks registered by the Federation of Finnish Financial Services that can be used only when the forwarding service complies with the valid Finvoice forwarding service description and terms and conditions for all parts. E-invoice refers to Finvoice invoices for consumers. The Federation of Finnish Financial Services owns the copyright to the descriptions and terms and conditions of the Finvoice forwarding service.

The use of the Finvoice forwarding service requires that both the Sender and the Receiver have signed an agreement on the Finvoice forwarding service with their service provider. Consumers agree with their service provider on the reception of e-invoices to the online bank or Web payment service.

The seller will generate an invoice corresponding to the description together with transmission frames and send it to the buyer via its service provider.

The buyer transfers the invoice information to its own systems or views the invoice in a browser. The invoice may be printed from the browser and processed in the traditional way.

Customers receiving and sending e-invoices can fetch each other’s addresses from the e-invoice address service maintained by Tieke. The site lists the company name, identifiers for sending and receiving, and service provider codes.

Another customer that uses the Finvoice forwarding service can be identified on the basis of the service provider code related to the address. In this case, this code is the service provider’s own BIC code. Both parties have signed an agreement on the Finvoice forwarding service with their service provider and agreed on the same service terms and conditions.

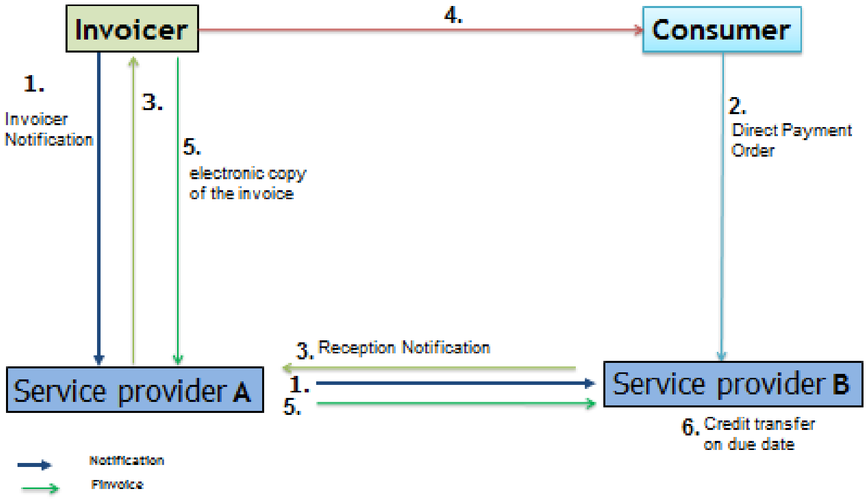
3. Consumer’s e-invoice

A consumer e-invoice is a Finvoice e-invoice that consumers receive in their online bank or Web payment service.

The Sender informs customers using a online bank or Web payment service of the Sender’s invoicer information by means of a FinvoiceSenderInfo message. On the basis of the message, the service provider makes the information available for the Customer in the online bank or Web payment service. The customer’s address information will be forwarded by means of a FinvoiceReceiverInfo message to the Sender.

The message description of the notification service (FinvoiceSenderInfo, FinvoiceReceiverInfo and ReceiverProposal), technical files, and the consumer communication material related to the consumer e-invoice are freely available on the Web site of the Federation of Finnish Financial Services at www.e-lasku.info.

4. Direct payment



1. Invoicer sends an Invoicer Notification, which states that the Invoicer provides e-invoice and direct payment as invoicing formats.
2. Consumer customer makes a direct payment order with their service provider, who then forms a Reception Notification to the Invoicer on the basis of the direct payment order.
3. The Reception Notification is forwarded to the Invoicer, and contains the information that the customer wants to use direct payment.
4. The Invoicer sends the invoice to the consumer customer in the agreed manner.
5. The Invoicer sends an electronic copy of the invoice in the Finvoice format.
6. The payer’s service provider effects the credit transfer on the basis of the invoice copy and payment order on the due date.

Direct payment is aimed for consumer customers who cannot receive consumer’s e-invoices in their online bank or web payment service. In direct payment, the Sender delivers the original invoice to the Customer, and then an electric copy of the invoice to its service provider in Finvoice format.

It is recommended that the Sender uses the Federation of Finnish Financial Services’ direct payment credit transfer template for the original invoice.

The Sender shall send the invoice to the Customer concurrently with sending the electric copy to be forwarded by the service provider. The invoice shall mention that it has been delivered to the direct payment service for processing. If an invoice contains several payments with different due dates, a separate copy of each invoice shall be sent to the payer's service provider. Only the first invoice's copy is sent concurrently with the invoice. Invoice copies with later due dates must, however, be delivered to the payer’s service provider well in advance of their respective due dates.

On the basis of the Customer’s payment order, the service provider will execute the credit transfer on the Customer’s behalf using the information on the invoice copy.

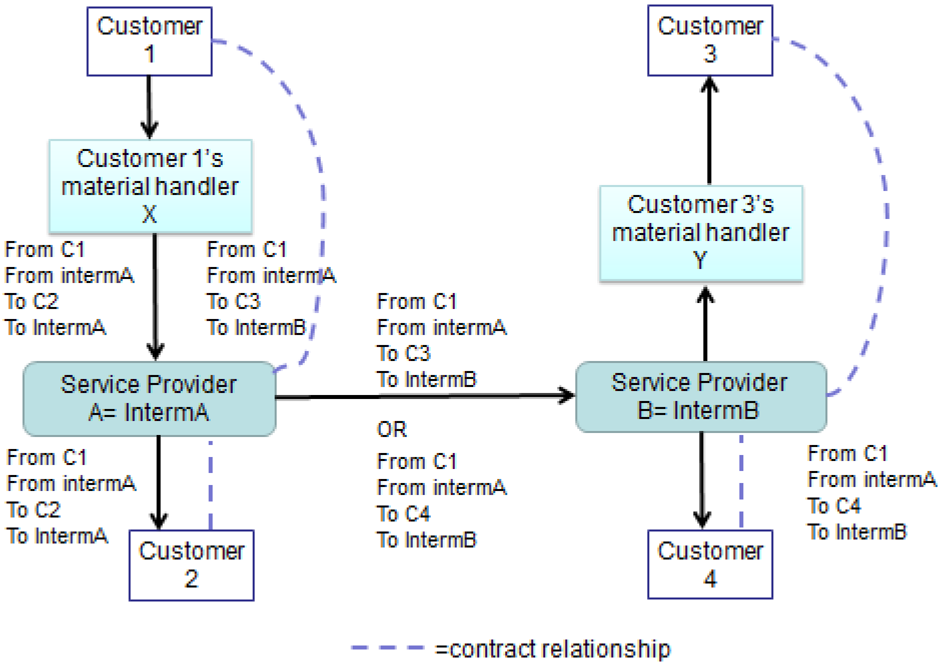
A consumer customer can use the direct payment service if the invoicer and the customer’s service provider both provide the service.

The Sender uses the FinvoiceSenderInfo message to notify service providers that it supports the direct payment service. The customer’s address information and notification of the use of direct payment are disclosed to the Sender with the FinvoiceReceiverInfo message.

If the invoicer wants to convert direct debit mandates to e-invoices and direct payments, the conversion can be made using the notification service messages.

5. Using a Material Handler in the Finvoice forwarding service

A material handler can be, for example, a service company, accounting firm or e-invoice operator. In the Finvoice forwarding service, the service provider always identifies the original Sender and Receiver.


Customer 1
Customer 1's material handler X
From C1
From intermA
To C2
To IntermA
From C1
From intermA
To C3
To IntermB
Service Provider A= IntermA
From C1
From intermA
To C2
To IntermA
Customer 2
From C1
From intermA
To C3
To IntermB
OR
From C1
From intermA
To C4
To IntermB
Customer 3
Customer 3's material handler Y
Service Provider B= IntermB
From C1
From intermA
To C4
To IntermB
Customer 4
=contract relationship

6. Descriptions related to the Finvoice forwarding service

The Implementation Guidelines include:

- a description of the electronic invoice structure and data contents covering all invoicing needs;
- an XSL description enabling the invoice to be represented in a browser and printed on paper;
- an XSD description (Schema) that is used in generating a Finvoice message. XSD specifies the message format.
- examples of an extensive and concise e-invoice;
- the ebXML transmission frame structure (SOAP) that enables the invoice to be forwarded directly from the seller to the buyer or via a third party;
- free archiving software available on the Federation website at www.finvoice.info; this software can be used to disassemble the invoice frame so that invoices can be managed in their own directory;
- the description and terms and conditions of the Finvoice forwarding service that describes the operation of the banks' services, agreement practices, and the terms and conditions of the service for the Sender and the Receiver;
- for consumer invoicing, the www.finvoice.info site includes implementation guidelines for the notification service and software for creating invoicer notifications.

Sector-specific implementation guidelines can be prepared for various sectors. Sector-specific implementation guidelines cannot be in conflict with this Finvoice implementation guideline. Sector-specific guidelines can be published on the Federation website at www.finvoice.info.

The Finvoice electronic invoice implementation guidelines and the DTD, XSD, and XSL files required for formal verification of the invoices are freely available on the website www.finvoice.info. A Finvoice invoice must include a reference to the style sheet used. This ensures that the invoice recipient sees the invoice information and may save the invoice on his own data medium as necessary.

7. Testing

The generation of an invoice message is always made using a schema file. In the example files, the reference to schema verification is in the comments. The service providers in the Finvoice forwarding service can provide the opportunity to test sending and reception in their services.

8. Finvoice message basic structure and recommendations for use

8.1 Message transmission frame

The transmission frame enables the invoice to be routed from the invoicer to the recipient.
The transmission frame is specified in more detail in section “Frame Description” of the implementation guidelines.

8.2 Message structure

At the bare minimum, the message must contain the following obligatory data:

- seller’s details
- buyer’s details
- invoice details
- invoice row details
- information provided by the seller for a payment order (ePI)

The minimum and maximum lengths of elements are defined in a separate data list.

Optional fields that contain no data must be omitted.

Each element in the invoice file always starts with a start tag “<” and ends with an end tag “>”. Each row must begin with the “<” character and end with the “>” character. The same applies to transmission frames. No spaces are allowed adjacent to the start and end tags (not even to e.g. make the field 35 characters long).

Example:
<SellerOrganisationName>Pullin Musiikki Oy</SellerOrganisationName>

If indentations are used in the invoice materials, the only character allowed for indentation is a blank character or space. Tab characters are not allowed.

The Finvoice forwarding service is not used to convey attachments. In the Finvoice forwarding service, the e-invoice forwarding is based on conveying data, not images or attachments. The receiving customer is able to use the data immediately in its own systems. The SpecificationFreeText field in SpecificationDetails can be used as necessary. The Sender can use this field to add formatted specification data, such as sector-specific information. One advantage of the SpecificationFreeText field is that no separate sector-specific style sheet is needed. Finvoice also includes a link that can be used by the Receiver of the invoice to view attachments in the service provided by the Sender or an authorised material handler.

8.3 Character set used in Finvoice messages

The ISO 8859-15 character set is used in Finvoice messages. In the Finvoice e-invoice, some predefined entities according to the XML standard must be used instead of special characters. The entities are as follows:

Char	Entity
&	&amp;
<	&lt;
>	&gt;
"	&quot;
'	&apos;

For example, the company name *Buy & Sell Ltd*. is written out as follows: *Buy &amp; Sell Ltd.*

8.4 Notification of numerical values using a Finvoice message

The following definitions of decimal positions are used for different types of numeric elements:

- In EPI data, money values should always be entered with two decimal positions so that a payment proposal can be generated from the e-invoice in the online bank.
- Amounts: if decimals are used, the numerical value may contain 2 to 5 decimals.
- Percentages are entered with 1 to 3 decimal positions.
- Exchange rates are entered with 6 decimal positions.

A comma (,) is always used as the decimal character. Note also that there are no leading zeros in numeric elements.

The integer part of the Amount must contain at least one digit. A decimal comma is mandatory and is included in the maximum length.

9. Recommendations for the use of Finvoice messages

The data content of Finvoice messages has been defined so that the message may be used in as many situations as possible. For this reason, many data items exist at both the general level and the row level. Even though the objective is that the message can be automatically processed in the recipient's systems, the data content is defined so that the data required for manual processing (such as addresses, contact persons, and footer information) is also available.

9.1 Use at the general level (invoice level) and row level

The message contains, for example, a DeliveryDetails field at the invoice level and the same information for each row. For example, an invoicing period may be represented at the invoice level in the StartDate and EndDate fields of DeliveryDetails, and the invoice rows may contain information related to the invoice in a Freetext field, or the invoicing period can be presented on a row-specific basis.

Row-specific invoice processing is recommended.

9.2 Using a Subtotal on the Rows

SubRow can be used for calculating row summaries, such as subtotals. The subtotal can be used to group the invoice rows by departments, product groups or orders, for example.

9.3 Using Posting Proposals and Automating Posting

The posting of an electronic invoice refers to a ready-made posting proposal on the e-invoice intended for the buyer’s financial accounting. The buyer can use the posting proposal to prepare its own accounting records.

Posting proposals are not mandatory for Finvoice messages, but the seller and buyer can agree on the use of posting data. The use of posting data also enables the automation of the buyer's accounting with regard to purchase transactions.
The objective of e-invoice posting proposals is to enable a simple and functional model for the automatic posting of purchase invoices and payment transactions. The

accounting of a particular company may require different or more versatile entry procedures, which may be facilitated by constructing company-specific customised entry procedures by means of the data obtained from e-invoices. These modifications must be performed in the buyer's accounting, as they would otherwise make the posting management for electronic invoices too complex.

Finvoice allows the use of posting proposals specific to the invoice as well as proposals specific to the row. A row-specific posting proposal allows the same invoice to contain invoicing related to both expenses and trade in goods.

In order to implement posting, the seller must know when creating the invoice whether the goods are bought for resale or use by the buyer. This information should be added to the buyer's basic information.

A posting proposal can be created in accordance with the basic list of accounts, in which case data is forwarded at the invoice level in the ShortProposedAccountIdentifier and NormalProposedAccountIdentifier fields. A posting proposal that is not based on the basic list of accounts is placed in the Dimension or ProposedAccountText element.

A posting proposal can also be created at the invoice row level, in which case the RowShortProposedAccountIdentifier and RowNormalProposedAccountIdentifier fields are used. RowAccountDimensionText and RowProposedAccountText are intended for forwarding mutually agreed posting and cost centre information.

Sellers can add their own posting data to the SellerAccountText element of the invoice. This data is intended for the seller's own accounting. If the seller delivers an invoice copy to the accounting firm, for example, postings related to the invoice can be completed in the seller's system or when an invoice is created.

9.4 Grounds for Invoices Exempt from VAT

The grounds for tax exemption shall be indicated in the VatFreeText or RowFreeText element and VatCode value. The VatCode value will be visualised with style sheet.

If the invoice sender or the invoice subject causes a different tax treatment, the tax information can be coded in the invoice or invoice row level. Tax codes are agreed in cooperation with the tax authorities.

VAT code	Finnish	English	Swedish
AB	Marginaalivero	Exempt for resale	Marginalskatt
AE	Käännetty ALV	VAT Reverse Charge	Omvänd Moms
E	Yhteisömyynti	Exempt from tax	gemenskapsförsäljning
G	Veroton myynti ulkomaille (kolmannet maat)	Free export item, tax not charged	Skattefri försäljning till utlandet (tredje land)
O	Veroton palvelu	Services outside scope of tax	Skattefri tjänst
S	Normaali veroprosentti	Standard rate	Normal skatteprocent

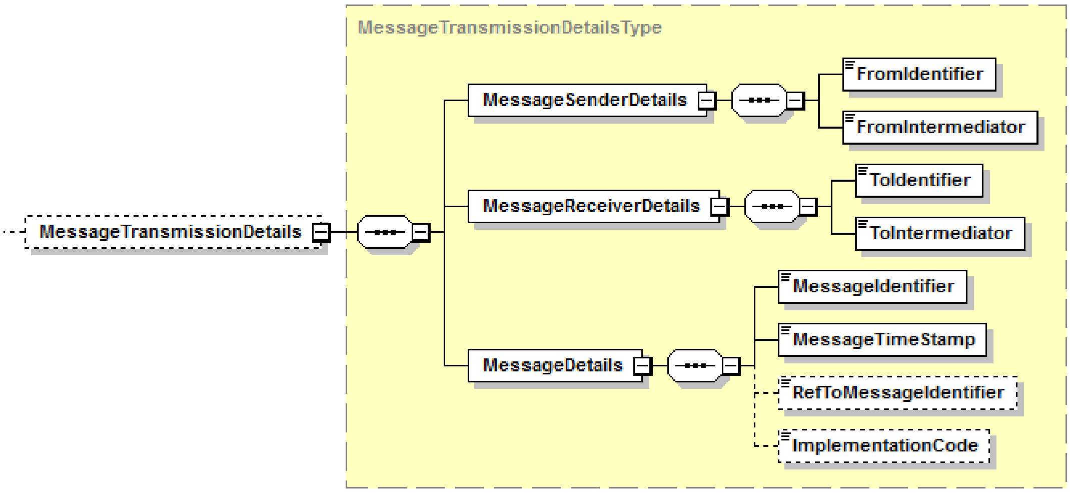
Z	Veroton tuote	Zero rated goods	Skattefri produkt
ZEG	Vero tavaraostoista muista EU-maista	Tax charged from goods bought from other EU countries	Skatt på köp av varor från andra EU-länder
ZES	Vero palveluostoista muista EU-maista	Tax charged from services bought from other EU countries	Skatt på köp av tjänster från andra EU-länder

10. The use of Data Elements

This section only lists specifications associated with the use of certain elements.

All data elements and their length, occurrence and usage are described in the data list within the application guidelines.

10.1 MessageTransmissionDetails


MessageTransmissionDetailsType
MessageTransmissionDetails
MessageSenderDetails
FromIdentifier
FromIntermediator
MessageReceiverDetails
ToIdentifier
ToIntermediator
MessageDetails
MessageIdentifier
MessageTimeStamp
RefToMessageIdentifier
ImplementationCode

MessageTransmissionDetails contains the same information as the SOAP frame, which is still mandatory in the Finvoice forwarding service.

Finvoice invoice's RefToMessageIdentifier at SOAP is returned with an acknowledgement message.

ImplementationCode

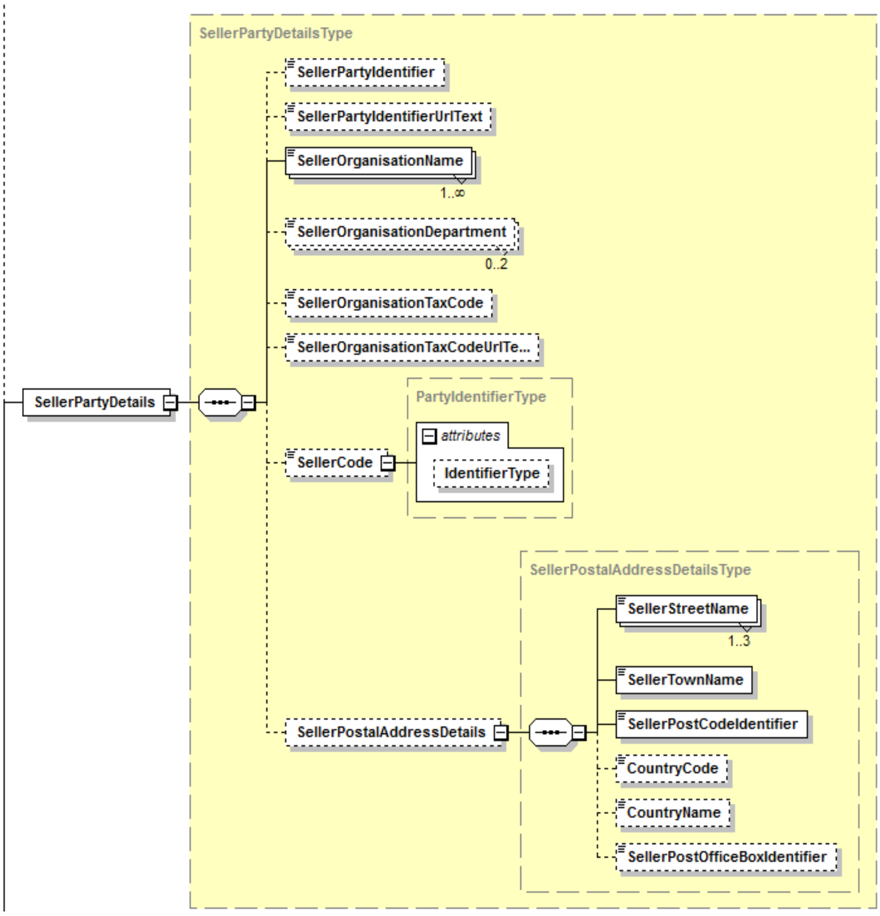
Sector-specific implementation guidelines are available at the Finvoice.info website.

10.2 SellerPartyDetails

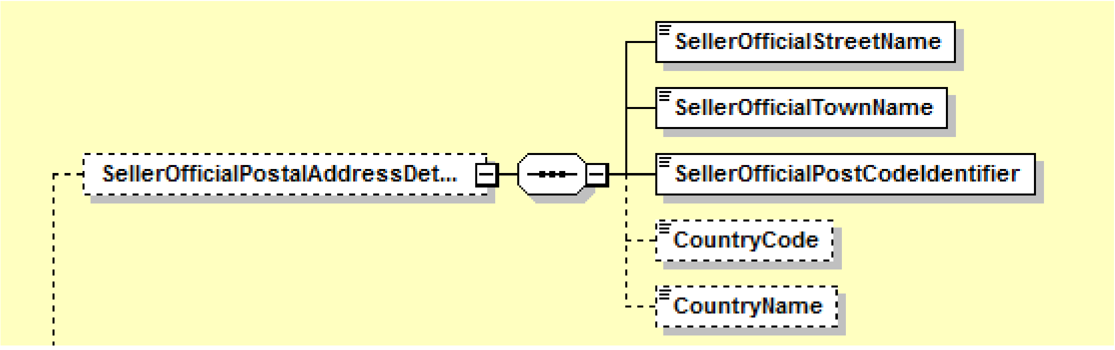
Contains the seller's information, some of which is mandatory. The seller's address field (SellerStreetName) is used to add either a street or visiting address. If the seller only has a post office box address, this address is to be added to the SellerStreetName field too.

SellerCode can be used to identify the party when the identifier is something else than a business ID (e.g. partyID DUNS, personal identitification code, GLN, EDI).

SellerPartyIdentifierUrlText can be used to add a link to the register of the National Board of Patents and Registration of Finland, where the business ID of a company can be checked. (www.ytj.fi)


SellerPartyDetailsType
SellerPartyIdentifier
SellerPartyIdentifierUrlText
SellerOrganisationName
1..∞
SellerOrganisationDepartment
0..2
SellerOrganisationTaxCode
SellerOrganisationTaxCodeUrlTe...
SellerPartyDetails
PartyIdentifierType
attributes
IdentifierType
SellerCode
SellerPostalAddressDetailsType
SellerStreetName
1..3
SellerTownName
SellerPostalAddressDetails
SellerPostCodeIdentifier
CountryCode
CountryName
SellerPostOfficeBoxIdentifier

The SellerOfficialPostalAddressDetails aggregate is used, for example, to add the official address of the parent company if it is different from the information provided in SellerPostalAddressDetails.


SellerOfficialStreetName
SellerOfficialTownName
SellerOfficialPostalAddressDet...
SellerOfficialPostCodeIdentifier
CountryCode
CountryName

10.3 SellerOrganisationUnitNumber

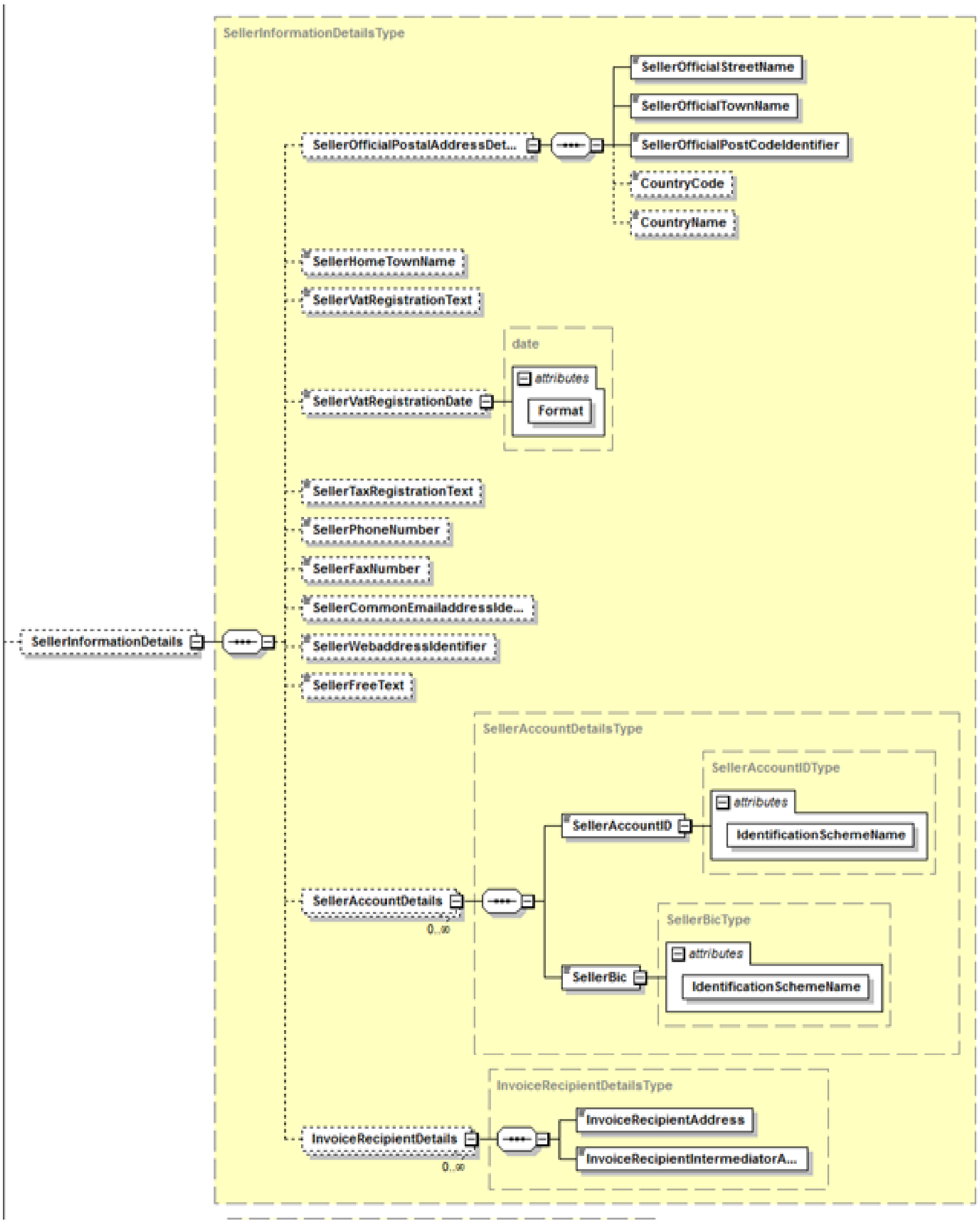
The party’s organisation unit, which is an SFS standard-compliant EDI identifier. The data can be used in the buyer’s system to identify the seller, for example.

An SFS standard-compliant EDI identifier has the following format:

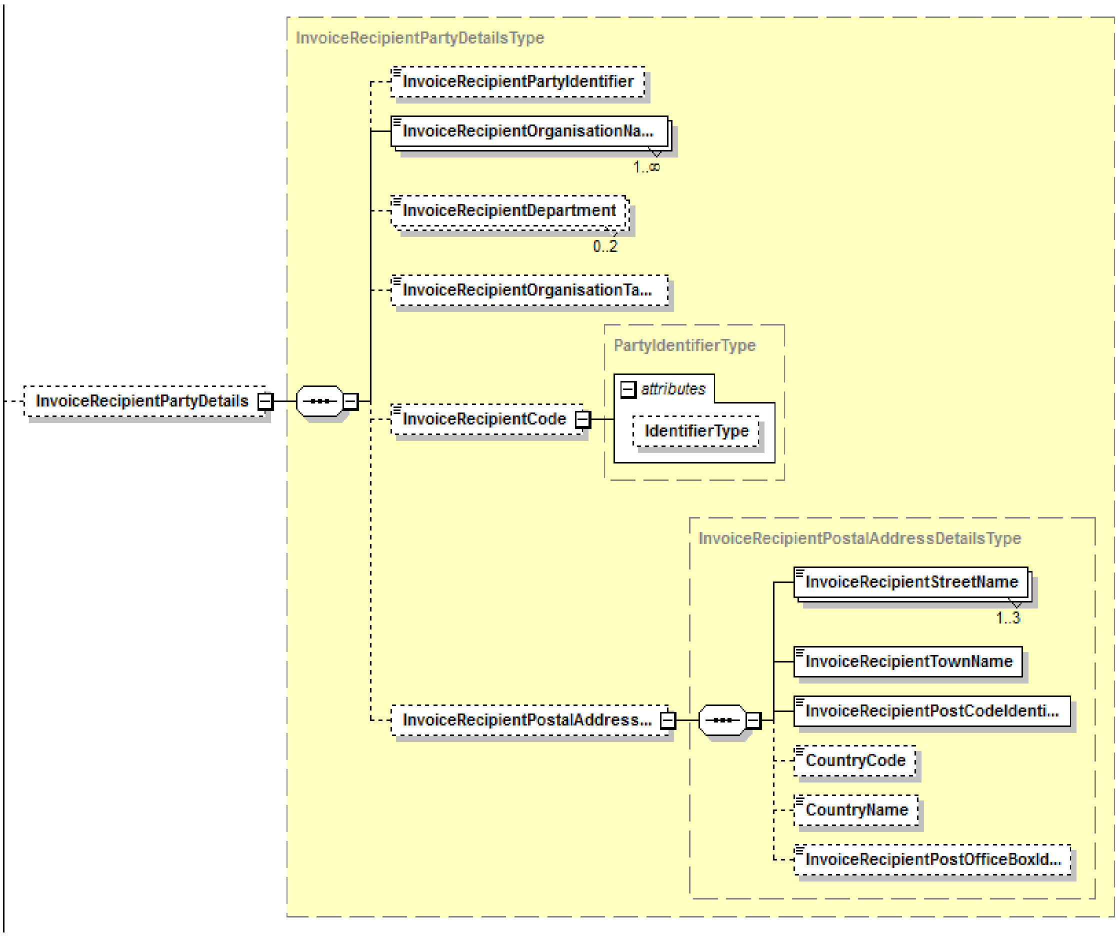
003712345678000001
- 0037 Country code for Finland
- 12345678 Business ID without a hyphen, eight characters
- 00001 Optional specifier for organisation unit

10.4 SellerInformationDetails

General contact information about the seller may be updated in the register of sellers. Recommended for use on an invoice-specific basis only when invoices are printed exclusively as hard copies.


SellerInformationDetailsType
SellerOfficialStreetName
SellerOfficialTownName
SellerOfficialPostalAddressDet...
SellerOfficialPostCodeIdentifier
CountryCode
CountryName
SellerHomeTownName
SellerVatRegistrationText
date
attributes
Format
SellerVatRegistrationDate
SellerTaxRegistrationText
SellerPhoneNumber
SellerFaxNumber
SellerCommonEmailaddressIde...
SellerInformationDetails
SellerWebaddressIdentifier
SellerFreeText
SellerAccountDetailsType
SellerAccountIDType
attributes
SellerAccountID
IdentificationSchemeName
SellerAccountDetails
0..∞
SellerBicType
attributes
SellerBic
IdentificationSchemeName
InvoiceRecipientDetailsType
InvoiceRecipientAddress
InvoiceRecipientDetails
0..∞
InvoiceRecipientIntermediatorA...

10.5 InvoiceRecipientPartyDetails


InvoiceRecipientPartyDetailsType
InvoiceRecipientPartyIdentifier
InvoiceRecipientOrganisationNa...
1..∞
InvoiceRecipientDepartment
0..2
InvoiceRecipientOrganisationTa...
PartyIdentifierType
attributes
IdentifierType
InvoiceRecipientPartyDetails
InvoiceRecipientCode
InvoiceRecipientPostalAddressDetailsType
InvoiceRecipientStreetName
1..3
InvoiceRecipientTownName
InvoiceRecipientPostalAddress...
InvoiceRecipientPostCodeIdenti...
CountryCode
CountryName
InvoiceRecipientPostOfficeBoxId...

The Recipient data group is used when the message recipient is not the buyer but, for example, an accounting firm or other party acting on the buyer's behalf.

The InvoiceRecipientOrganisationName element can be repeated several times. The elements are used to identify names and units associated with the same organisation.

10.6 InvoiceRecipientOrganisationUnitNumber

The party’s organisation unit, which is an SFS standard-compliant EDI identifier.

An SFS standard-compliant EDI identifier has the following format:

0037123456780001

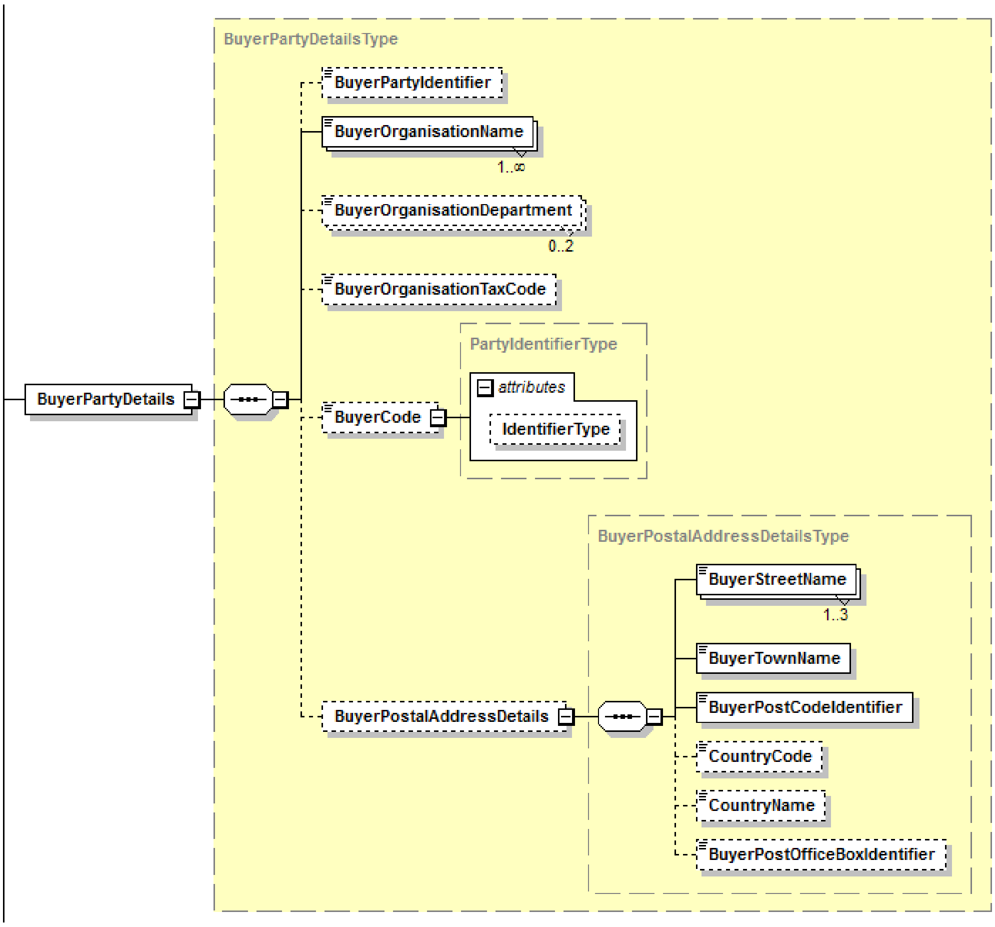
-	0037	Country code for Finland
-	12345678	Business ID without hyphen
-	00001	Optional specifier for organisation unit

10.7 InvoiceRecipientLanguageCode

The InvoiceRecipientLanguageCode field is used to enter the recipient's language code that can be used, for example, to present or print invoice header information according to the recipient's language code.

In the consumer e-invoice, the language depends on the language code specified in the recipient's online bank or Web payment service.

10.8 BuyerPartyDetails


BuyerPartyDetailsType
BuyerPartyIdentifier
BuyerOrganisationName
1..∞
BuyerOrganisationDepartment
0..2
BuyerOrganisationTaxCode
PartyIdentifierType
attributes
IdentifierType
BuyerPartyDetails
BuyerCode
BuyerPostalAddressDetailsType
BuyerStreetName
1..3
BuyerTownName
BuyerPostCodeIdentifier
CountryCode
CountryName
BuyerPostOfficeBoxIdentifier
BuyerPostalAddressDetails

The buyer's VAT number (VatNumber) must be included in the BuyerOrganisationTaxCode element (e.g. FI99999999), if the buyer is liable to pay tax on the basis of a reverse charge procedure or in the case of intra-Community supply. Furthermore, the grounds for any tax exemption shall be indicated in VatFreeText. RowFreeText is used at the row level.

The BuyerOrganisationName element can be repeated several times. The elements are used to identify names and units associated with the same organisation.

10.9 BuyerOrganisationUnitNumber

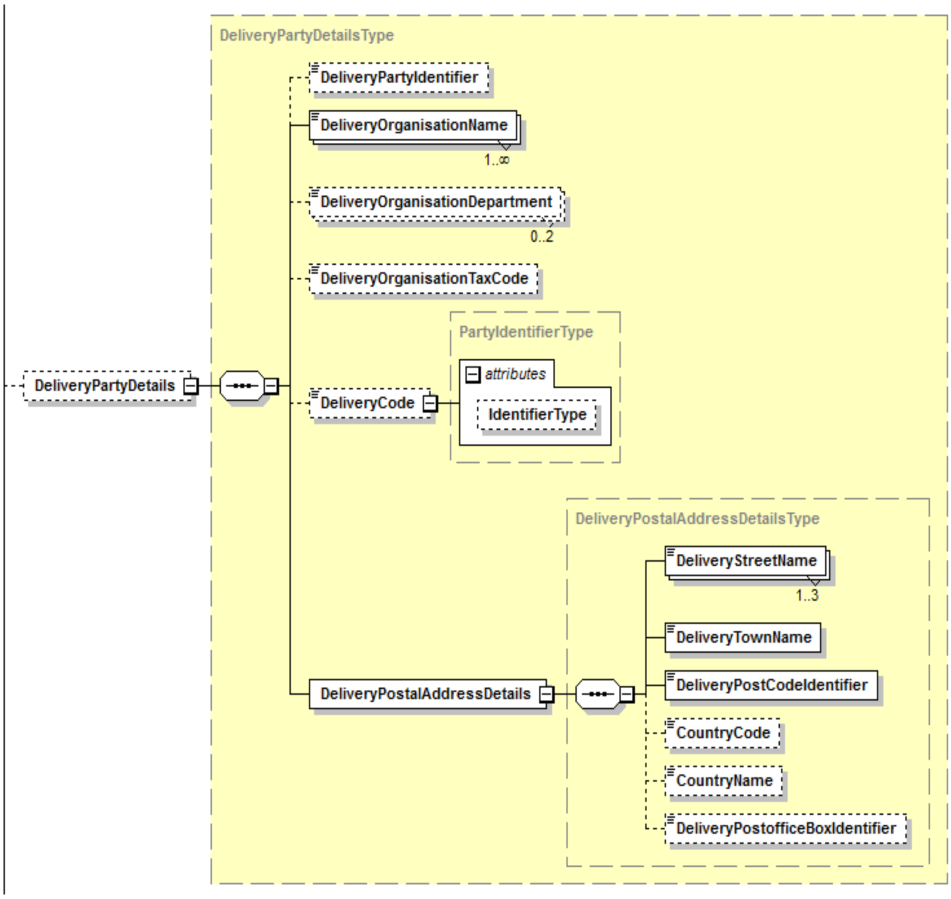
The party’s organisation unit, which is an SFS standard-compliant EDI identifier.

An SFS standard-compliant EDI identifier has the following format:

003712345678000001

-	0037	Country code for Finland
-	12345678	Business ID without hyphen
-	00001	Optional specifier for organisation unit

10.10 DeliveryPartyDetails


DeliveryPartyDetailsType
DeliveryPartyIdentifier
DeliveryOrganisationName
1..∞
DeliveryOrganisationDepartment
0..2
DeliveryOrganisationTaxCode
PartyIdentifierType
attributes
IdentifierType
DeliveryPartyDetails
DeliveryCode
DeliveryPostalAddressDetailsType
DeliveryStreetName
1..3
DeliveryTownName
DeliveryPostCodeIdentifier
DeliveryPostalAddressDetails
CountryCode
CountryName
DeliveryPostofficeBoxIdentifier
]

Delivery party details are used when the goods have been delivered to a party other than the buyer.

The DeliveryOrganisationName element can be repeated several times. The elements are used to identify names and units associated with the same organisation.

10.11 DeliveryOrganisationUnitNumber

The party's organisation unit, which is an SFS standard-compliant EDI identifier.

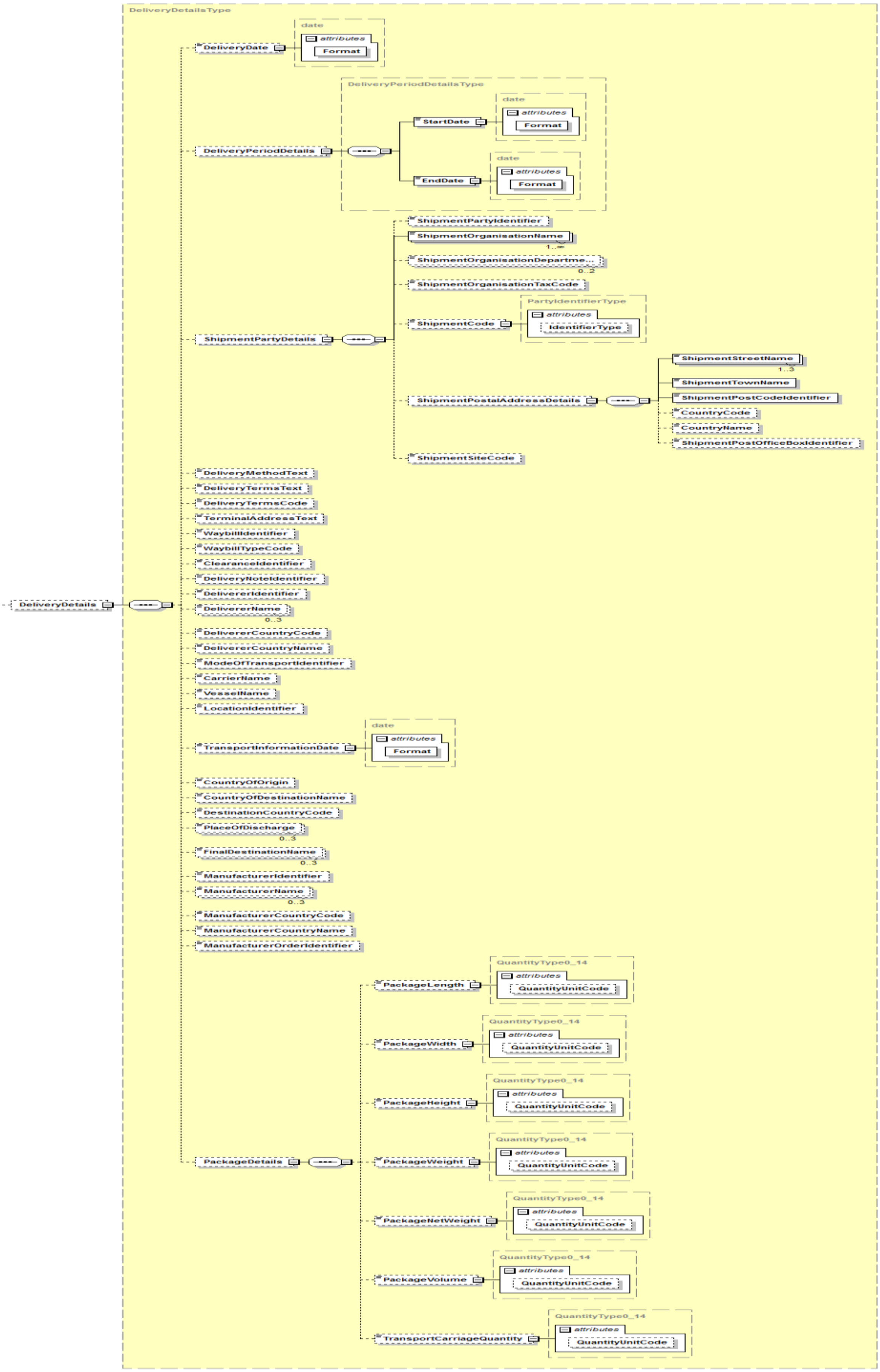
An SFS standard-compliant EDI identifier has the following format:

003712345678000001
- 0037 Country code for Finland
- 12345678 Business ID without hyphen
- 00001 Optional specifier for organisation unit

10.12 DeliveryDetails

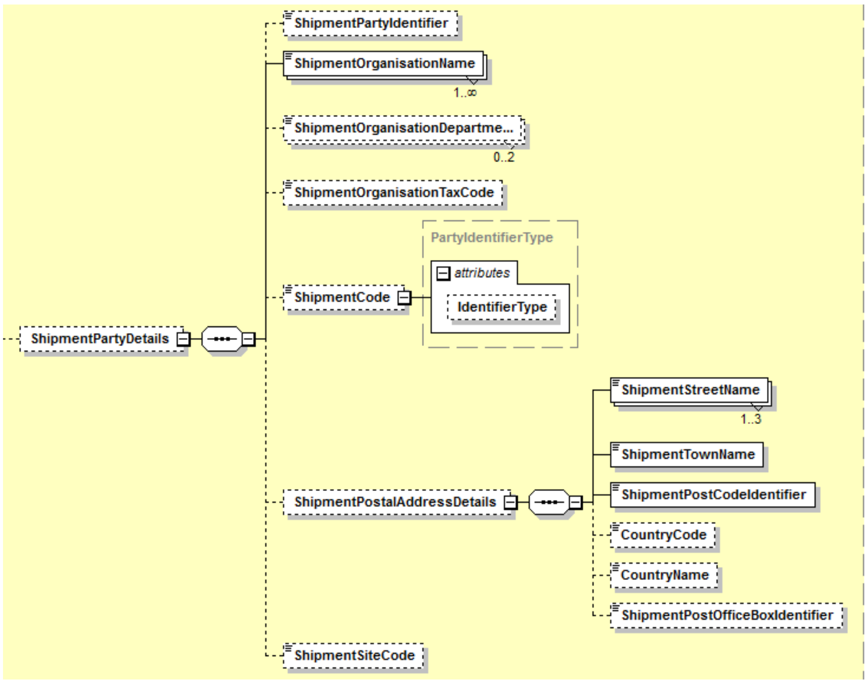
Details regarding delivery. If the delivery is related to a time period (for example, power for a specific period) the delivery is indicated as a start and end date.

DeliveryDetails can be used to forward identification data related to the delivery, such as the delivery method, waybill details, customs clearance reference, the name of the deliverer, manufacturer, the place of unloading, the identification data related to transportation, and delivery size information. The data can be presented at the invoice level and row level.

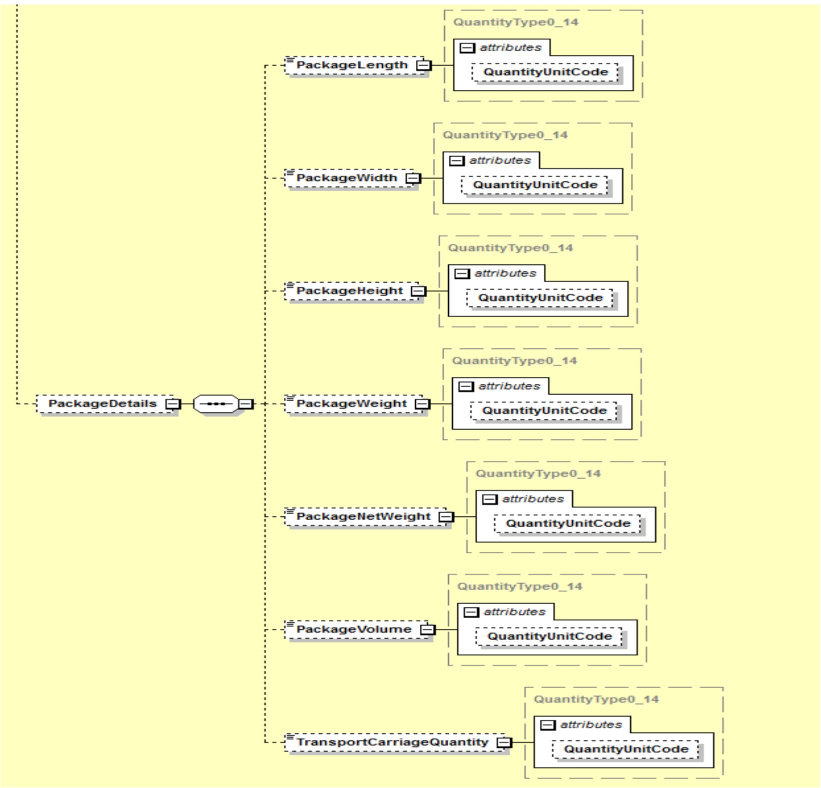

DeliveryDetailsType
DeliveryDetails
DeliveryDate
date
attributes
Format
DeliveryPeriodDetails
DeliveryPeriodDetailsType
StartDate
date
attributes
Format
EndDate
date
attributes
Format
ShipmentPartyDetails
ShipmentPartyIdentifier
ShipmentOrganisationName
1..∞
ShipmentOrganisationDepartme...
0..2
ShipmentOrganisationTaxCode
ShipmentCode
PartyIdentifierType
attributes
IdentifierType
ShipmentPostalAddressDetails
ShipmentStreetName
1..3
ShipmentTownName
ShipmentPostCodeIdentifier
CountryCode
CountryName
ShipmentPostOfficeBoxIdentifier
ShipmentSiteCode
DeliveryMethodText
DeliveryTermsText
DeliveryTermsCode
TerminalAddressText
WaybillIdentifier
WaybillTypeCode
ClearanceIdentifier
DeliveryNoteIdentifier
DelivererIdentifier
DelivererName
0..3
DelivererCountryCode
DelivererCountryName
ModeOfTransportIdentifier
CarrierName
VesselName
LocationIdentifier
TransportInformationDate
date
attributes
Format
CountryOfOrigin
CountryOfDestinationName
DestinationCountryCode
PlaceOfDischarge
0..3
FinalDestinationName
0..3
ManufacturerIdentifier
ManufacturerName
0..3
ManufacturerCountryCode
ManufacturerCountryName
ManufacturerOrderIdentifier
PackageDetails
PackageLength
QuantityType0_14
attributes
QuantityUnitCode
PackageWidth
QuantityType0_14
attributes
QuantityUnitCode
PackageHeight
QuantityType0_14
attributes
QuantityUnitCode
PackageWeight
QuantityType0_14
attributes
QuantityUnitCode
PackageNetWeight
QuantityType0_14
attributes
QuantityUnitCode
PackageVolume
QuantityType0_14
attributes
QuantityUnitCode
TransportCarriageQuantity
QuantityType0_14
attributes
QuantityUnitCode

10.13 ShipmentPartyDetails

The ShipmentPartyDetails aggregate specifies the shipping agent's contact information.


ShipmentPartyDetails
ShipmentPartyIdentifier
ShipmentOrganisationName
1..∞
ShipmentOrganisationDepartme...
0..2
ShipmentOrganisationTaxCode
PartyIdentifierType
attributes
ShipmentCode
IdentifierType
ShipmentStreetName
1..3
ShipmentTownName
ShipmentPostalAddressDetails
ShipmentPostCodeIdentifier
CountryCode
CountryName
ShipmentPostOfficeBoxIdentifier
ShipmentSiteCode

10.14 PackageDetails


PackageDetails
QuantityType0_14
attributes
PackageLength
QuantityUnitCode
QuantityType0_14
attributes
PackageWidth
QuantityUnitCode
QuantityType0_14
attributes
PackageHeight
QuantityUnitCode
QuantityType0_14
attributes
PackageWeight
QuantityUnitCode
QuantityType0_14
attributes
PackageNetWeight
QuantityUnitCode
QuantityType0_14
attributes
PackageVolume
QuantityUnitCode
QuantityType0_14
attributes
TransportCarriageQuantity
QuantityUnitCode

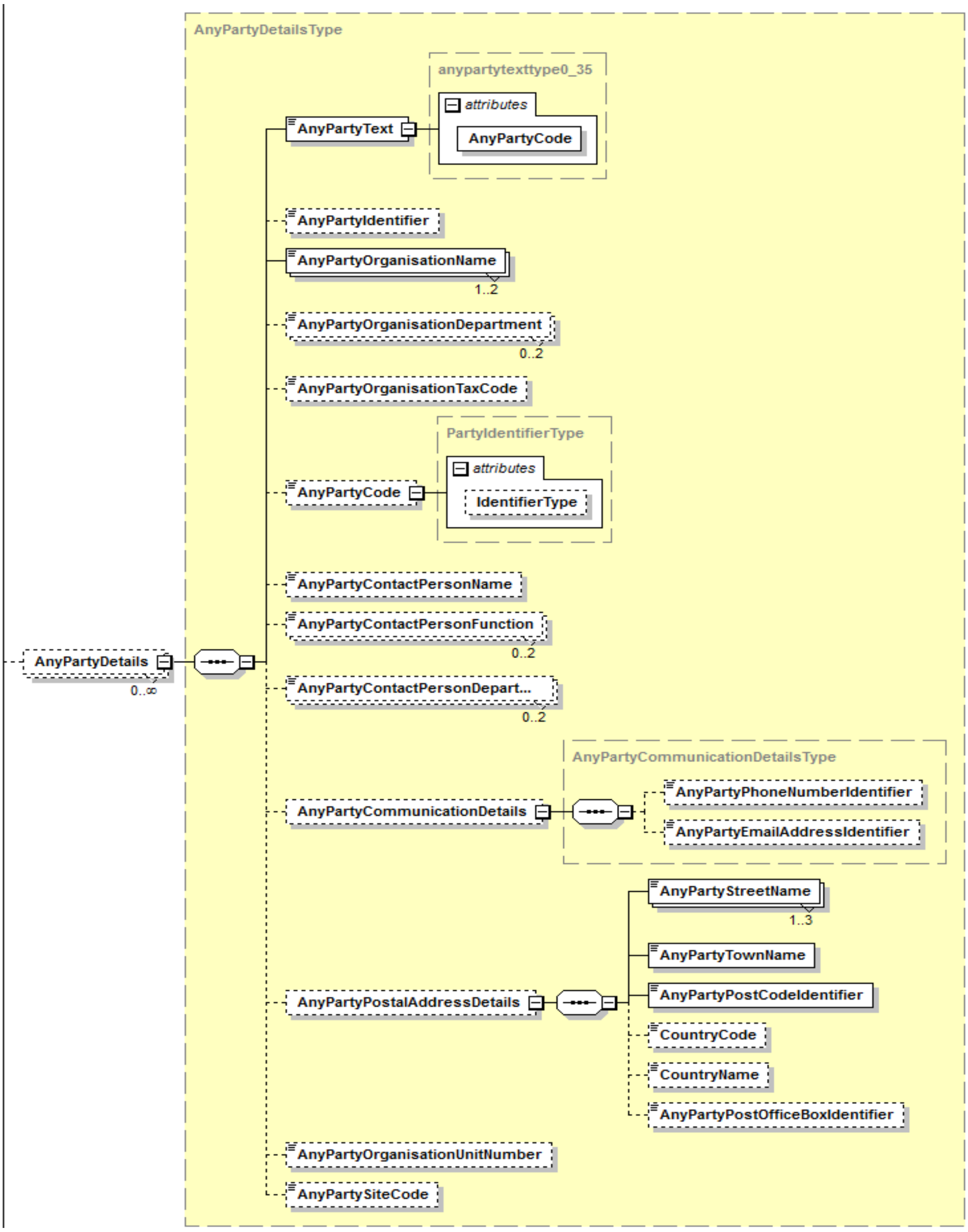
The PackageDetails aggregate specifies information related to the package.

10.15 AnyPartyDetails

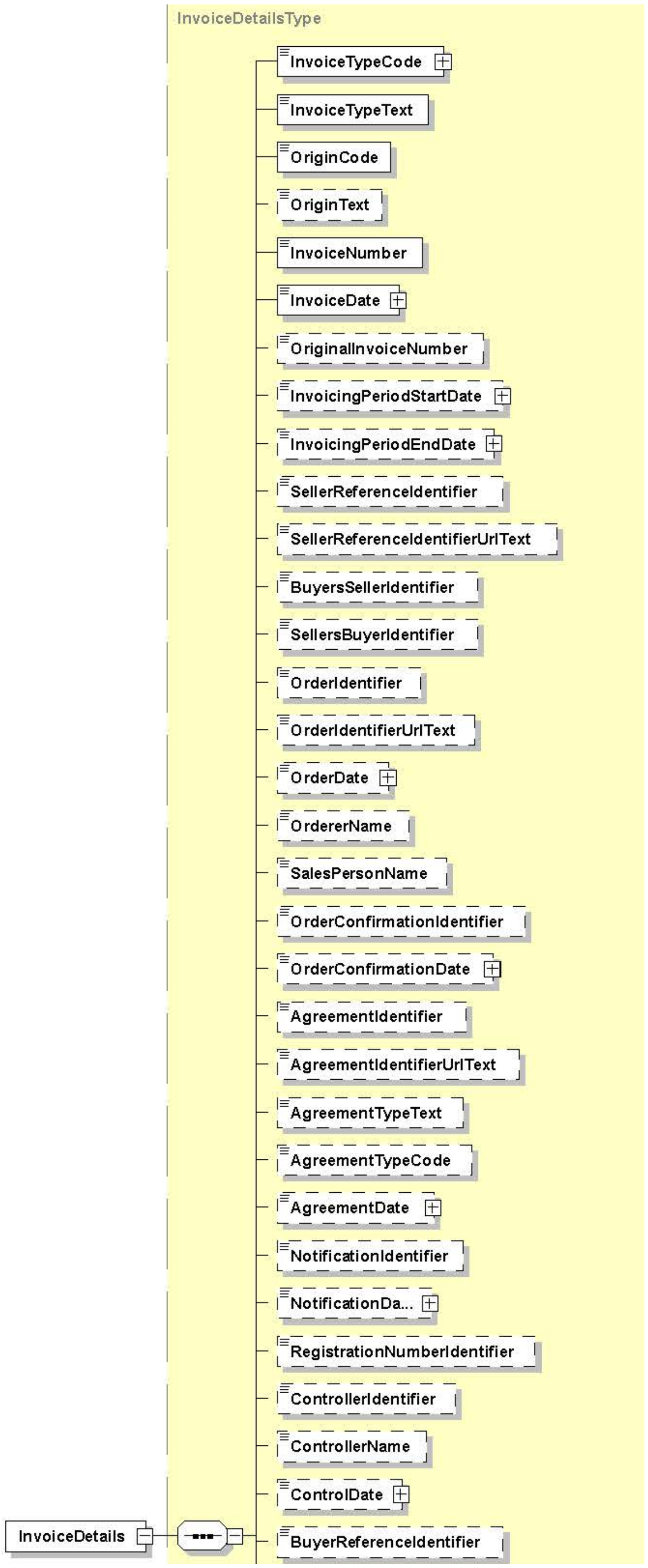
This element can be used to specify a party that has no element of its own in Finvoice. The AnyPartyText element specifies a header and a code that corresponds to the header for a party. This code is printed in the layout of the invoice.

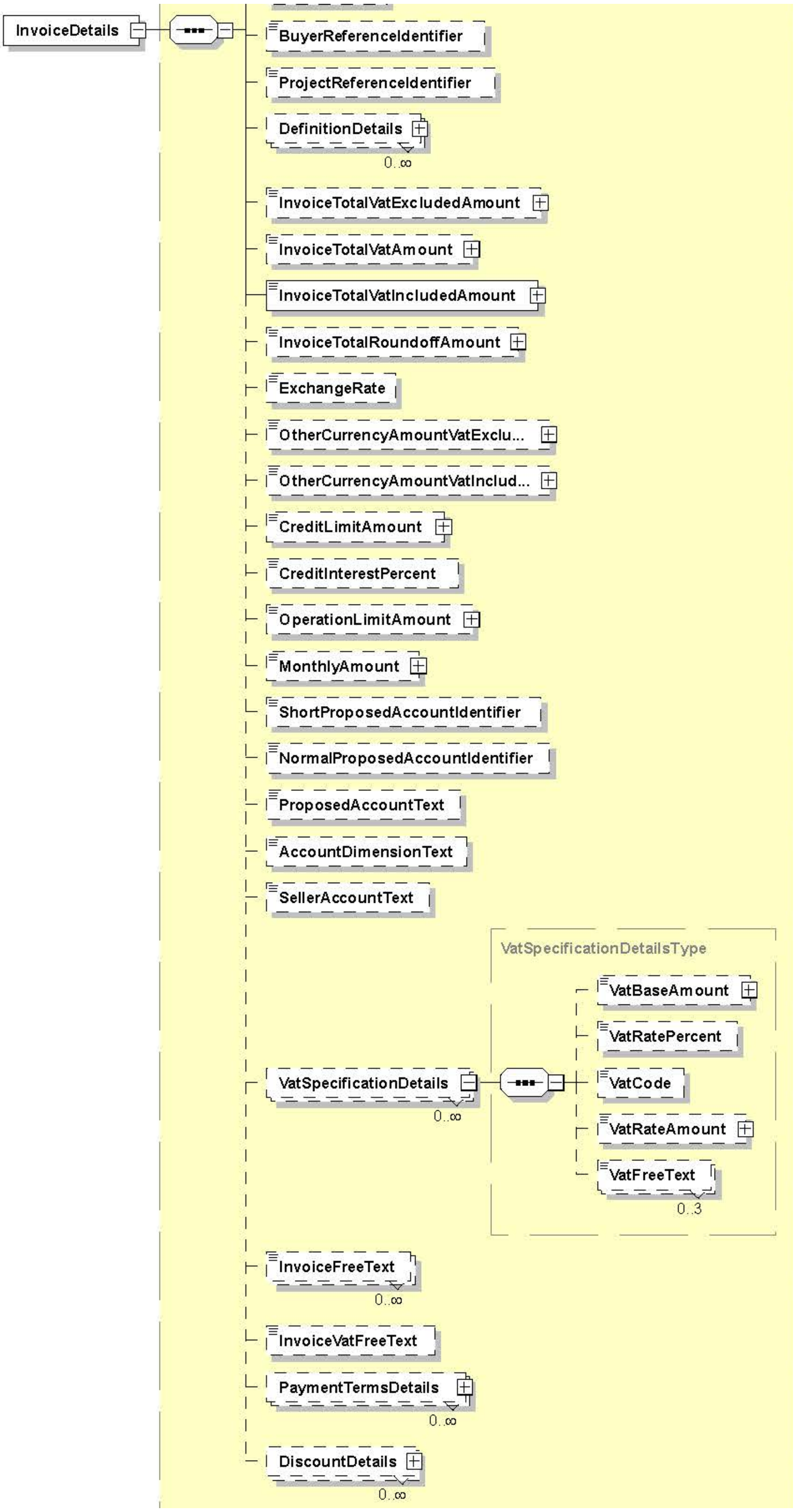
AnyParty can be specified at the invoice level or row level. The AnyParty aggregate can be repeated.

Each sector can define how this element is used.


AnyPartyDetailsType
anypartytexttype0_35
attributes
AnyPartyText
AnyPartyCode
AnyPartyIdentifier
AnyPartyOrganisationName
1..2
AnyPartyOrganisationDepartment
0..2
AnyPartyOrganisationTaxCode
PartyIdentifierType
attributes
AnyPartyCode
IdentifierType
AnyPartyContactPersonName
AnyPartyContactPersonFunction
0..2
AnyPartyDetails
0..∞
AnyPartyContactPersonDepart...
0..2
AnyPartyCommunicationDetailsType
AnyPartyPhoneNumberIdentifier
AnyPartyCommunicationDetails
AnyPartyEmailAddressIdentifier
AnyPartyStreetName
1..3
AnyPartyTownName
AnyPartyPostalAddressDetails
AnyPartyPostCodeIdentifier
CountryCode
CountryName
AnyPartyPostOfficeBoxIdentifier
AnyPartyOrganisationUnitNumber
AnyPartySiteCode

10.16 InvoiceDetails


InvoiceDetailsType
InvoiceTypeCode
InvoiceTypeText
OriginCode
OriginText
InvoiceNumber
InvoiceDate
OriginalInvoiceNumber
InvoicingPeriodStartDate
InvoicingPeriodEndDate
SellerReferenceIdentifier
SellerReferenceIdentifierUrlText
BuyersSellerIdentifier
SellersBuyerIdentifier
OrderIdentifier
OrderIdentifierUrlText
OrderDate
OrdererName
SalesPersonName
OrderConfirmationIdentifier
OrderConfirmationDate
AgreementIdentifier
AgreementIdentifierUrlText
AgreementTypeText
AgreementTypeCode
AgreementDate
NotificationIdentifier
NotificationDa...
RegistrationNumberIdentifier
ControllerIdentifier
ControllerName
ControlDate
BuyerReferenceIdentifier
InvoiceDetails


InvoiceDetails
BuyerReferenceIdentifier
ProjectReferenceIdentifier
DefinitionDetails
0..∞
InvoiceTotalVatExcludedAmount
InvoiceTotalVatAmount
InvoiceTotalVatIncludedAmount
InvoiceTotalRoundoffAmount
ExchangeRate
OtherCurrencyAmountVatExclu...
OtherCurrencyAmountVatInclud...
CreditLimitAmount
CreditInterestPercent
OperationLimitAmount
MonthlyAmount
ShortProposedAccountIdentifier
NormalProposedAccountIdentifier
ProposedAccountText
AccountDimensionText
SellerAccountText
VatSpecificationDetailsType
VatBaseAmount
VatRatePercent
VatSpecificationDetails
0..∞
VatCode
VatRateAmount
VatFreeText
0..3
InvoiceFreeText
0..∞
InvoiceVatFreeText
PaymentTermsDetails
0..∞
DiscountDetails
0..∞

Payment terms are used when the seller has calculated a deduction or delay in the invoice. The account posting details should include at least account posting in accordance with the basic list of accounts.

The code INV01 is used when sending invoices between companies and sending e-invoices to consumers. Code INV09 is used when an electronic copy of the direct payment is sent to the service provider.

Invoice Type Codes and Texts:

Invoice Type Code	InvoiceTypeText	Description
REQ01	REQUEST FOR QUOTATION	Request for Quotation
QUO01	QUOTATION	Quotation
ORD01	ORDER	Order
ORC01	ORDER CONFIRMATION	Order Confirmation
DEV01	DELIVERY NOTE	e.g. a dispatch note
INV01	INVOICE	Commercial Invoice, e-invoice
INV02	CREDIT NOTE	Credit Note or Cancellation Invoice. Always a negative total sum
INV03	INTEREST NOTE	Interest note refers to an invoice that is used to charge interest only. See RowOverduePaymentDetails.
INV04	INTERNAL INVOICE	
INV05	COLLECT NOTE	
INV06	PRO FORMA INVOICE	
INV07	SELFBILLING	
INV08	REMINDER INVOICE	
INV09	DIRECT PAYMENT	Electronic invoice copy of direct payment delivered to Service Provider.
TES01	TEST INVOICE	Test Invoice
PRI01	PRICE LIST	Price List
INF01	INFORMATION	This can be the minimum data of the invoice. Message is written on the rows of the RowFreeText element.
DEN01	DELIVERY ERROR NOTIFICATION	Delivery error notification
SEI01-09	SECURE INVOICE	Secure Invoice (An invoice that requires special handling. For example, the invoice contains patient information.) The use of a secure invoice must be agreed upon separately with the Service Provider.

InvoiceTypeCode and InvoiceTypeText may be sector-specific, in which case the sector of business is responsible for publishing and maintaining the values to be used.

The total message amount consists of invoice rows, which can be positive or negative. The total message amount of a Finvoice message with code INV01 can be positive or negative.

Credit note is sent with code INV02. The details of the credit note are displayed in the online bank and web payment service for the recipient’s information. Sending a credit note does not create a credit transaction on the recipient's account. The Sender must therefore separately agree on crediting with the recipient, if it is needed.

Using the OriginalInvoiceNumber element in credit notes, reminder notes, and interest notes

The element specifies the identifier of the original invoice. If credit notes or interest invoices are associated with several different invoices, the identification information for the original invoices shall be specified at the row level in the OriginalInvoiceNumber element.

Using OriginCode and cancelling invoice message in consumer invoicing

Permitted values in the OriginCode element of a Finvoice message are *Original* and *Copy*. In the credit note message (INV02) the *Cancel* code is also used.

Service providers carry out the cancellation for direct payment customers. For e-invoice customers, cancellation depends on the service provider. If the Finvoice invoice cannot be matched with the credit note, or the service provider does not support the cancellation function, the credit note is displayed for information in the online bank or web payment service.

The Cancel code can be used when the Sender of the invoice wants to notify the recipient that the original invoice is fully redundant. Electronic copy of the direct payment cancellation is sent to the service provider using code INV02 together with CancelOriginCode. The Sender shall also notify the recipient of the direct payment about the cancellation.

The service provider can delete a payment order from its service on the basis of a credit note that has the cancellation code (cancellation invoice), if the payment order has not been executed and the cancellation message can be matched.

The invoicer sends the service provider a cancellation invoice and, if necessary, a revised Finvoice invoice. The invoicer also sends a revised invoice to the direct payment customer(s). If the invoice has already been paid, the invoicer refunds the extra transaction or reimburses it in the next invoice either in accordance with the agreement between the invoicer and payer, or in accordance with the practices of the invoicer’s sector.

Cancellation invoice details in Finvoice message

Invoice Type Code
<OriginCode>Cancel</OriginCode>

With credit note code
<InvoiceTypeCode CodeListAgencyIdentifier="SPY">INV02</InvoiceTypeCode>

Total euro amount of the original invoice as negative. Partial cancellations cannot be made.
<EpiInstructedAmount></EpiInstructedAmount>

Invoice type
<InvoiceTypeText>CANCELLATION INVOICE</InvoiceTypeText>

Information to the recipient of invoice
<InvoiceFreeText>INVOICE CANCELLED BY INVOICER</InvoiceFreeText>

The details of the cancellation invoice must be identical with the previously sent electronic invoice copy of the direct payment, so that the service provider can cancel the payment proposal that was based on the direct payment order. The following information must be identical:

- Due date (EpiDateOptionDate)
- Invoicer's credit account (EpiAccountID)
- Reference (EpiRemittanceInfoIdentifier)
- Amount as negative (EpiInstructedAmount)
- Reason for invoicing (EpiPaymentInstructionId)
- Receiving address and Intermediator ID of the e-invoice recipient
- Sender of the invoice shall send the e-invoice cancellation using the same address and FromIdentifier as they used when the e-invoice was sent.

If the direct payment cancellation request cannot be matched with the payment order, the service provider can send an ACK message with code 6 and the description ”Cancellation could not be allocated.”

The invoicer may not initiate recovery proceedings on an invoice that it has cancelled.

The cancellation message shall be at the consumer customer's service at least one banking day prior to the due date; a cancellation message received later than this cannot be matched with the payment order. If the invoicer uses a single service provider in the forwarding of Finvoice material, the cancellation data must be sent to the invoicer's service provider at least 4 banking days prior to the due date.

BuyerSellerIdentifier and SellerBuyerIdentifier

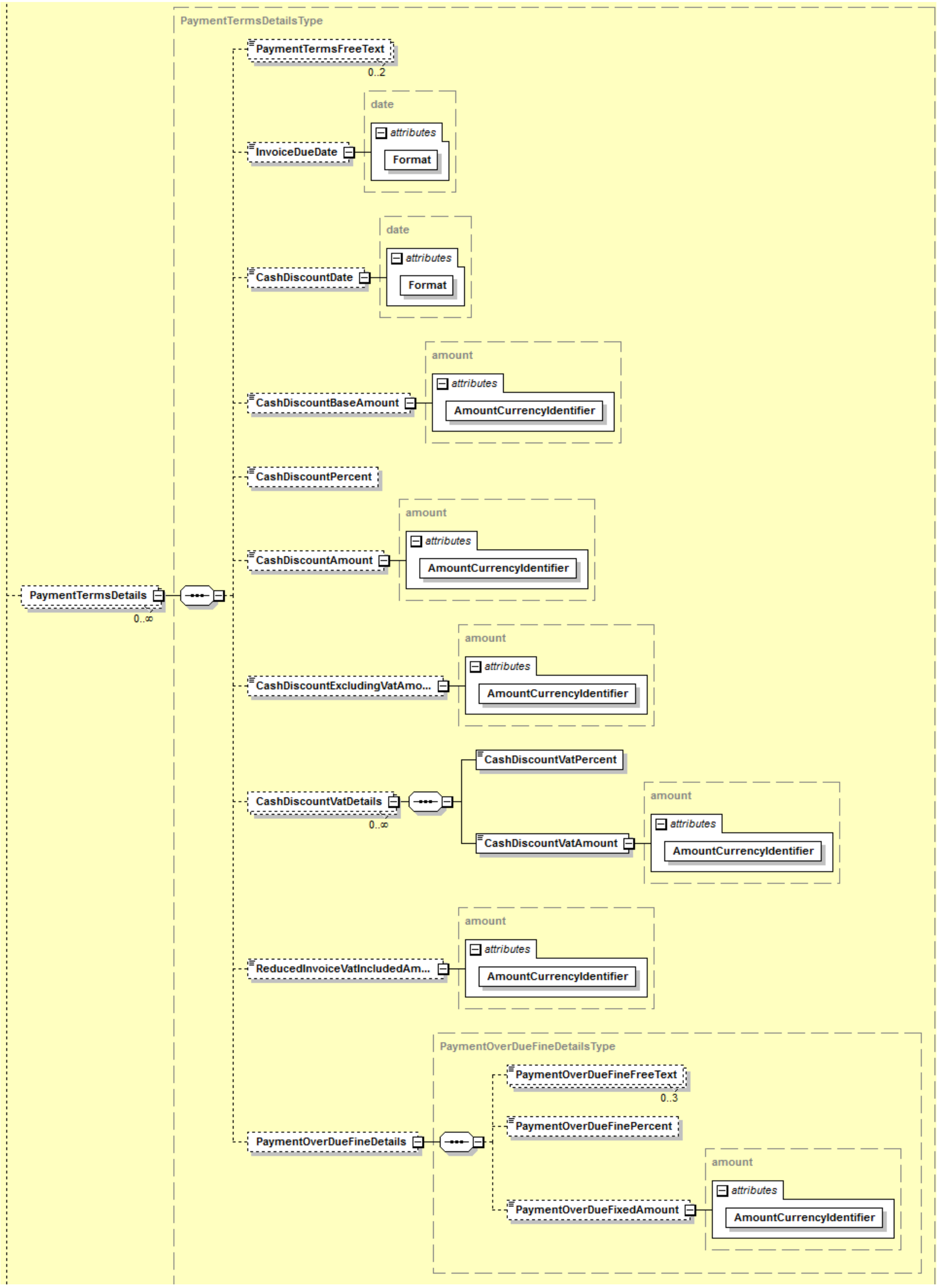
The required customer numbers are specified in the BuyerSellerIdentifier and SellerBuyerIdentifier elements.

10.17 PaymentTermsDetails

If the invoice includes a conditional discount such as a cash discount, the tax authorities' guidelines specify that the amounts payable on different due dates, or at least the value of such a conditional discount including tax, must be pre-calculated. The amount of the discount including tax is specified in the CashDiscountAmount element. The VAT amounts, amounts excluding VAT, and the amount of VAT related to the discount are specified in the corresponding elements.

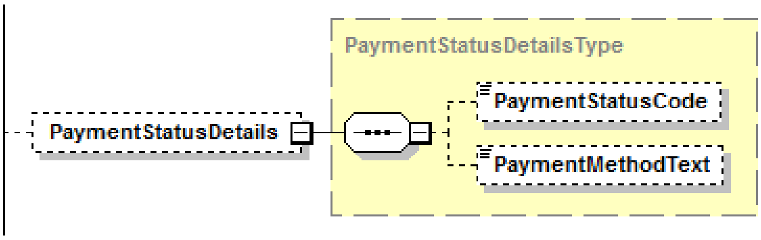
The due date of the payment (according to the normal terms of payment) is also specified in the EpiDateOptionDate element of the EPI.

The guidelines given by the Finnish Consumer Agency specify that a company should send an e-invoice to the consumer so that there is a period of two weeks at minimum between the invoice sending date and the invoice due date.


PaymentTermsDetailsType
PaymentTermsFreeText
0..2
date
attributes
InvoiceDueDate
Format
date
attributes
CashDiscountDate
Format
amount
attributes
CashDiscountBaseAmount
AmountCurrencyIdentifier
CashDiscountPercent
amount
attributes
CashDiscountAmount
AmountCurrencyIdentifier
PaymentTermsDetails
0..∞
amount
attributes
CashDiscountExcludingVatAmo...
AmountCurrencyIdentifier
CashDiscountVatPercent
amount
attributes
CashDiscountVatDetails
0..∞
CashDiscountVatAmount
AmountCurrencyIdentifier
amount
attributes
ReducedInvoiceVatIncludedAm...
AmountCurrencyIdentifier
PaymentOverDueFineDetailsType
PaymentOverDueFineFreeText
0..3
PaymentOverDueFinePercent
PaymentOverDueFineDetails
amount
attributes
PaymentOverDueFixedAmount
AmountCurrencyIdentifier

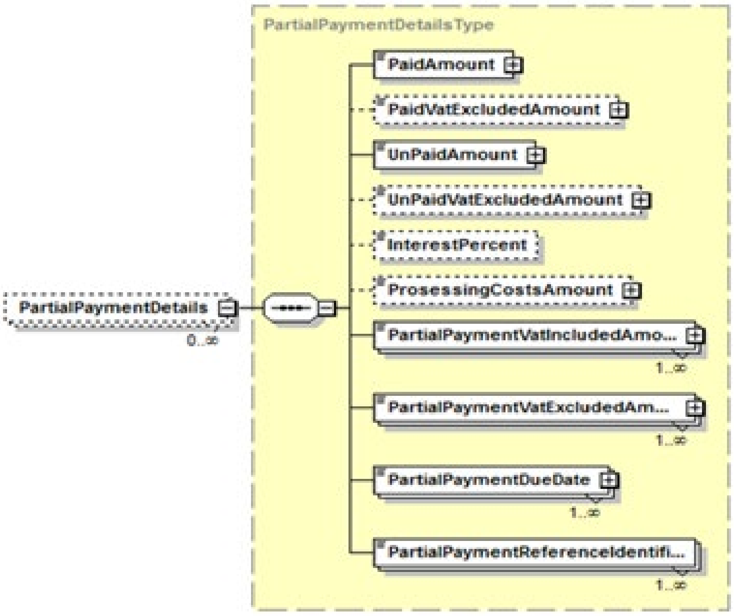
10.18 PaymentStatus

Payment status specifies whether the invoice has been paid. The payment method must be indicated for paid invoices. Partial payment and instalments of the invoice shall be indicated in the PartialPayment part.


PaymentStatusDetailsType
PaymentStatusDetails
PaymentStatusCode
PaymentMethodText

10.19 PartialPaymentDetails

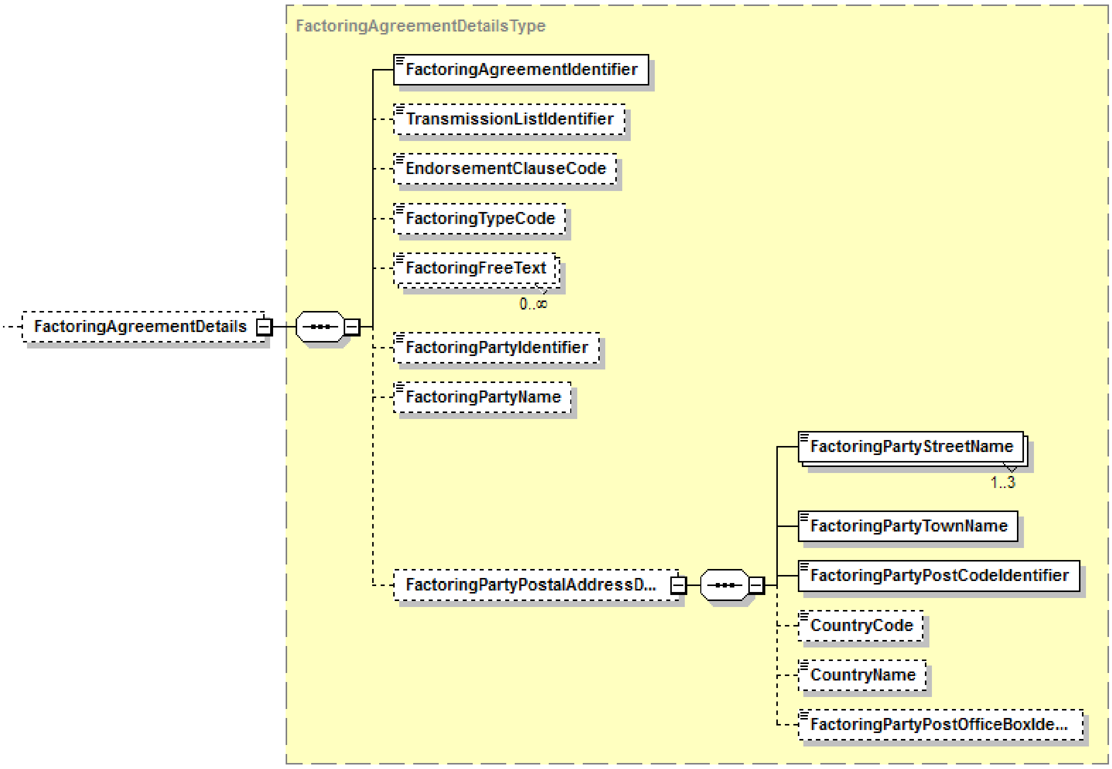
The PaymentStatusCode for a invoice paid for by card or cash is PAID, and the amount in the EpiInstructedAmount element of the EPI must be 0,00.


PartialPaymentDetailsType
PartialPaymentDetails
0..∞
PaidAmount
PaidVatExcludedAmount
UnPaidAmount
UnPaidVatExcludedAmount
InterestPercent
ProsessingCostsAmount
PartialPaymentVatIncludedAmo...
1..∞
PartialPaymentVatExcludedAm...
1..∞
PartialPaymentDueDate
1..∞
PartialPaymentReferenceIdentifi...
1..∞

10.20 FactoringAgreementDetails

The information required by the financing company is forwarded in the FactoringAgreementDetails element. The Sender sends a copy of the original invoice to the financing company.

The FactoringFreeText element is used to enter the assignment clause specified by the financing company. For more detailed information, refer to the sector-specific instructions for financing companies at www.finvoice.info.


FactoringAgreementDetailsType
FactoringAgreementDetails
FactoringAgreementIdentifier
TransmissionListIdentifier
EndorsementClauseCode
FactoringTypeCode
FactoringFreeText
0..∞
FactoringPartyIdentifier
FactoringPartyName
FactoringPartyPostalAddressD...
FactoringPartyStreetName
1..3
FactoringPartyTownName
FactoringPartyPostCodeIdentifier
CountryCode
CountryName
FactoringPartyPostOfficeBoxIde...

10.21 VirtualBankBarcode

A virtual bar code can be added to the invoices that should be printed. The start character (Start Code C) in the structure of a bar code, authentication code 2 (Check character/Modulo 103 checksum) or the stop character (Stop character) will not be printed in the virtual bar code. 54 digits will be printed in the virtual bar code.

11. InvoiceRow

Unit price is the price of the product or service without tax, and is displayed depending on the invoicing system or the agreement between the seller and buyer. The price is affected by quantity, which can be described with the following elements:

DeliveredQuantity:	quantity of product delivered.
ConfirmedQuantity:	confirmed quantity. The element is used if the entire confirmed order is invoiced as a single payment even when the order is delivered in several batches.
OrderedQuantity:	the quantity that was ordered.
InvoicedQuantity:	the quantity that is invoiced.

Unit price can be stated with tax excluded in the UnitPriceAmount element. Prices are given with tax excluded or included (UnitPriceVatIncludedAmount element), according to the invoicing policy and the tax authorities’ VAT guidelines.

If the hours are billed hours should inform the decimal e.g 12,5 h

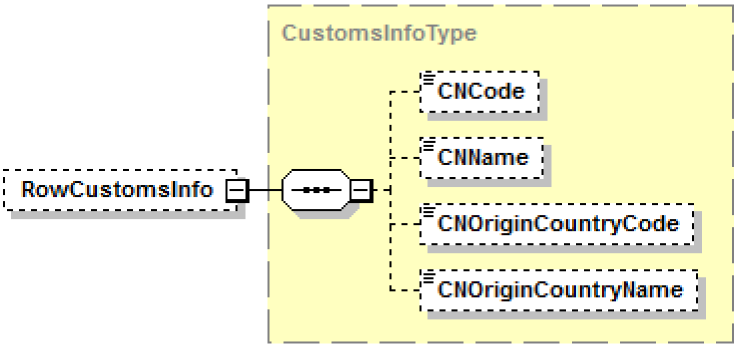
11.1 RowOverDuePaymentDetails

RowCollectionDate element is used to state the number of collection attempts.

11.2 DefinitionDetails

The invoice row can be used to include additional description of the product or service. The header of a data item and corresponding code for the header are specified in RowDefinitionHeaderText. The codes should be defined for each sector. The data item that corresponds to the header and the data item's code are specified in the RowDefinitionText element. In addition, RowDefinitionValue can be used to specify a value for the data item.

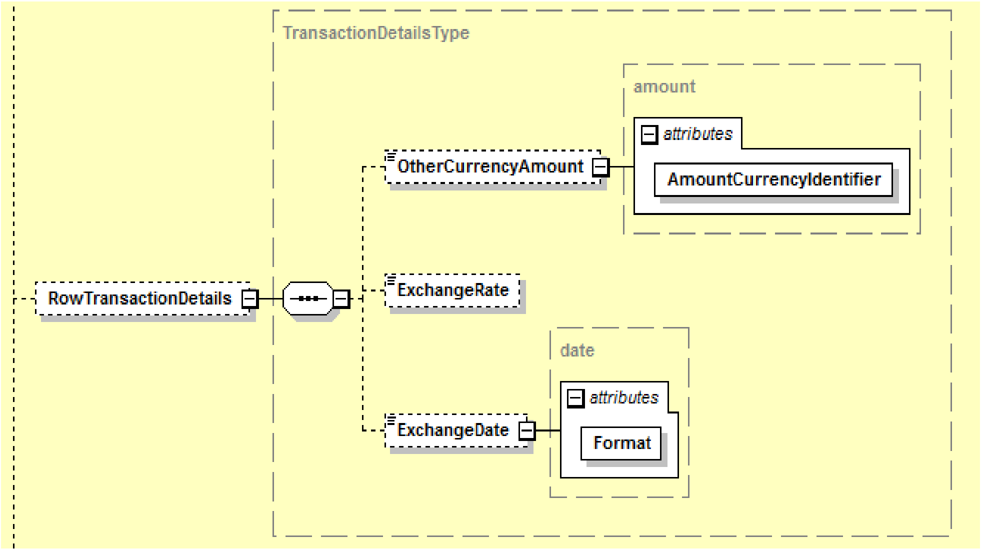
11.3 RowCustomsInfo


CustomsInfoType
RowCustomsInfo
CNCode
CNName
CNOriginCountryCode
CNOriginCountryName

Row level customs clearance data can also be specified under RowDeliveryDetails.

11.4 TransactionDetails

The currency amount, exchange rate and exchange date of e.g. the original purchase in card transactions.


TransactionDetailsType
amount
attributes
AmountCurrencyIdentifier
OtherCurrencyAmount
RowTransactionDetails
ExchangeRate
date
attributes
Format
ExchangeDate

11.5 Discounts on invoice rows

Discounts may be granted at the row level or as chained discounts.

12. SubInvoiceRow

The SubInvoiceRow aggregate is intended for **presenting summary rows generated from invoice rows**. No summary invoices are generated from invoices transmitted as Finvoice messages. SubInvoiceRow can be used to facilitate the invoice review process in connection with invoice visualisation.

The SubRowAmount element holds the total of the preceding RowAmount elements. In the message layout (XSL), the rows are printed in bold.

The information in the InvoiceRow aggregate is used for calculating the total amounts and VAT summaries for the invoices. The information in the SubRow elements is not used for calculating the invoice total, because this might cause rounding errors and does not support automatic processing.

SubInvoiceRow is a sub-aggregate of InvoiceRow. In this case, InvoiceRow only includes SubInvoiceRow.

The simplest way to use SubInvoiceRow is to enter text describing the summary in the SubArticleName element and the total number of the preceding rows in SubRowAmount.

SubRow can be used to provide a reference for matching the SubInvoiceRow with designated InvoiceRow aggregates.

There can be more than one subtotal row per invoice row.

The invoice cannot contain SubInvoiceRows only because the calculation of the invoice total, for example, is based on InvoiceRow.

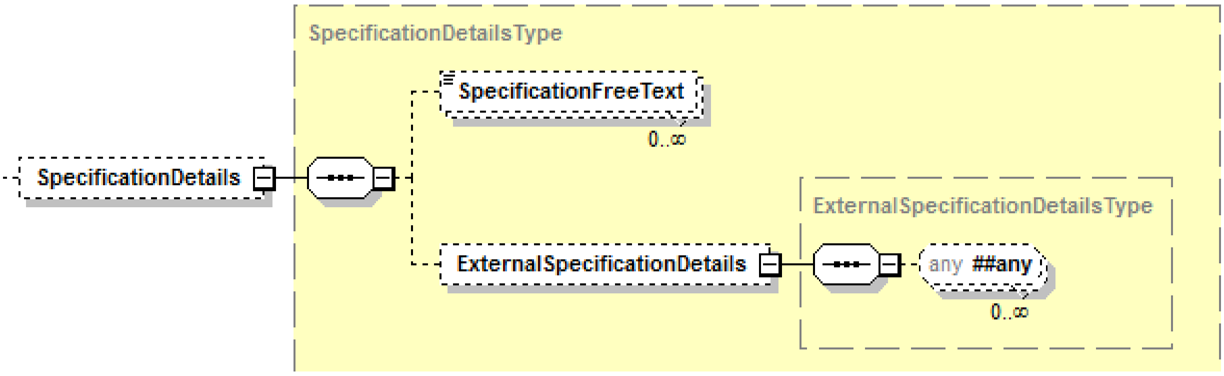
12.1 SubRowDeliveryDetails

The elements specify the delivery-related information for each row.
The RowQuotationIdentifier element can be used to provide a reference to a quotation.

13. SpecificationDetails

Sector-specific specification details may be presented inside this aggregate, for example, the specification details of an electricity invoice or a telephone invoice, etc.

Specification details should be visualised using a fixed-width such as Courier. Each row may only contain 80 characters. When automatic word wrap is enabled, the use of Enter/Return for line breaks is not allowed.



The specifications can be presented in a formatted way in the SpecificationFreeText element, which allows the information to be presented to the payer using the standard XSL of the Federation of Finnish Financial Services.

Example:

```
<SpecificationDetails>
<SpecificationFreeText>INVOICE DETAILED STATEMENT:     </SpecificationFreeText>
<SpecificationFreeText>Column 1    Column 2    Column 3</SpecificationFreeText>
<SpecificationFreeText>--------------------------------</SpecificationFreeText>
<SpecificationFreeText>1.Column    2.Column       10,00</SpecificationFreeText>
<SpecificationFreeText>2. row      2. row       1 00,00</SpecificationFreeText>
<SpecificationFreeText>3. row      3/2             1,00</SpecificationFreeText>
</SpecificationDetails>
```

14. ePIDetails

The EPI contains the data, provided by the payer, necessary for creating the payment order to be delivered to the bank. The EPI is designed for transferring both national and international payment orders. The EPI enables automatic processing from payer to recipient via service providers.

The EpiInstructedAmount element indicates the amount that the Sender has specified to be paid.

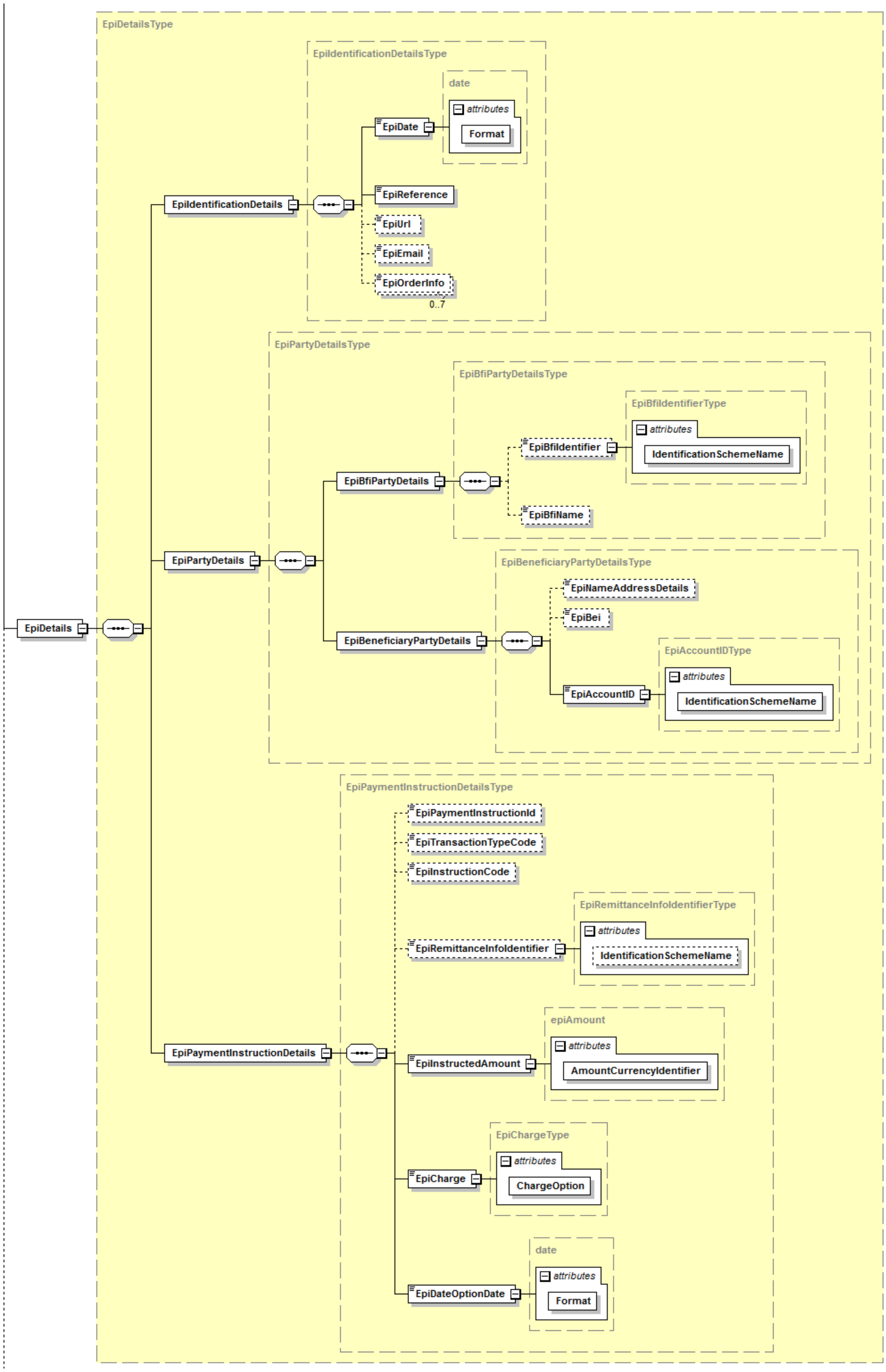
In Finland, the EpiRemittanceInfoIdentifier element always contains a reference number compliant with the banking standard, with no spaces and padded with leading zeros. The attribute “SPY” indicates the reference number standard of the Federation of Finnish Financial Services. For international references the attribute is “ISO”. So that the payment proposal/order can be created accurately, the reference is always required with consumer’s e-invoices and invoice copies of direct payments.

The EpiAccountID element contains the payee’s account number in IBAN format. The account number shall be specified in electronic format in accordance with instructions issued by each country; in Finland, for example, the IBAN consists of 18 characters. With IBAN- account number you should have banks BIC code in EpiBfIdentifier field as well.

The EPI is described in the ECBS standard number EBS 602. Some of the data elements specified as mandatory in the standard are not used in Finland.

The EpiPaymentInstructionId element must contain the same information as the PaymentInstructionIdentifier element of the SenderInfo message and the ReceiverInfo message created by the consumer. The information is obligatory in consumer e-invoices in order to enable the making of automatic payments in a online bank. If the data item is missing or does not correspond with the notification message, the service provider will reject the Finvoice message.

EpiNameAddressDetails field is mandatory because the recipient’s name is necessary for creating the payment.


EpiDetailsType
EpiIdentificationDetailsType
date
attributes
Format
EpiDate
EpiReference
EpiUrl
EpiEmail
EpiOrderInfo
0..7
EpiIdentificationDetails
EpiPartyDetailsType
EpiBfiPartyDetailsType
EpiBfiIdentifierType
attributes
IdentificationSchemeName
EpiBfiIdentifier
EpiBfiPartyDetails
EpiBfiName
EpiBeneficiaryPartyDetailsType
EpiNameAddressDetails
EpiBei
EpiPartyDetails
EpiDetails
EpiBeneficiaryPartyDetails
EpiAccountIDType
attributes
EpiAccountID
IdentificationSchemeName
EpiPaymentInstructionDetailsType
EpiPaymentInstructionId
EpiTransactionTypeCode
EpiInstructionCode
EpiRemittanceInfoIdentifierType
attributes
EpiRemittanceInfoIdentifier
IdentificationSchemeName
epiAmount
attributes
EpiPaymentInstructionDetails
EpiInstructedAmount
AmountCurrencyIdentifier
EpiChargeType
attributes
EpiCharge
ChargeOption
date
attributes
EpiDateOptionDate
Format

15. LayOutIdentifier

This element can be used to specify the name of a separate XSL style sheet agreed between the Sender and the service provider. This style sheet can then be used by the service provider to create an invoice image in the online bank according to the Sender's wishes. If this field is not in use, the invoice image specified by the Federation of Finnish Financial Services (Finvoice.xsl) is used.

16. InvoiceSegmentIdentifier

This element can be used to specify marketing segment information for the Receiver to add a desired marketing link, specific to this Receiver, to the invoice links section.

17. Invoice Calculation Rules

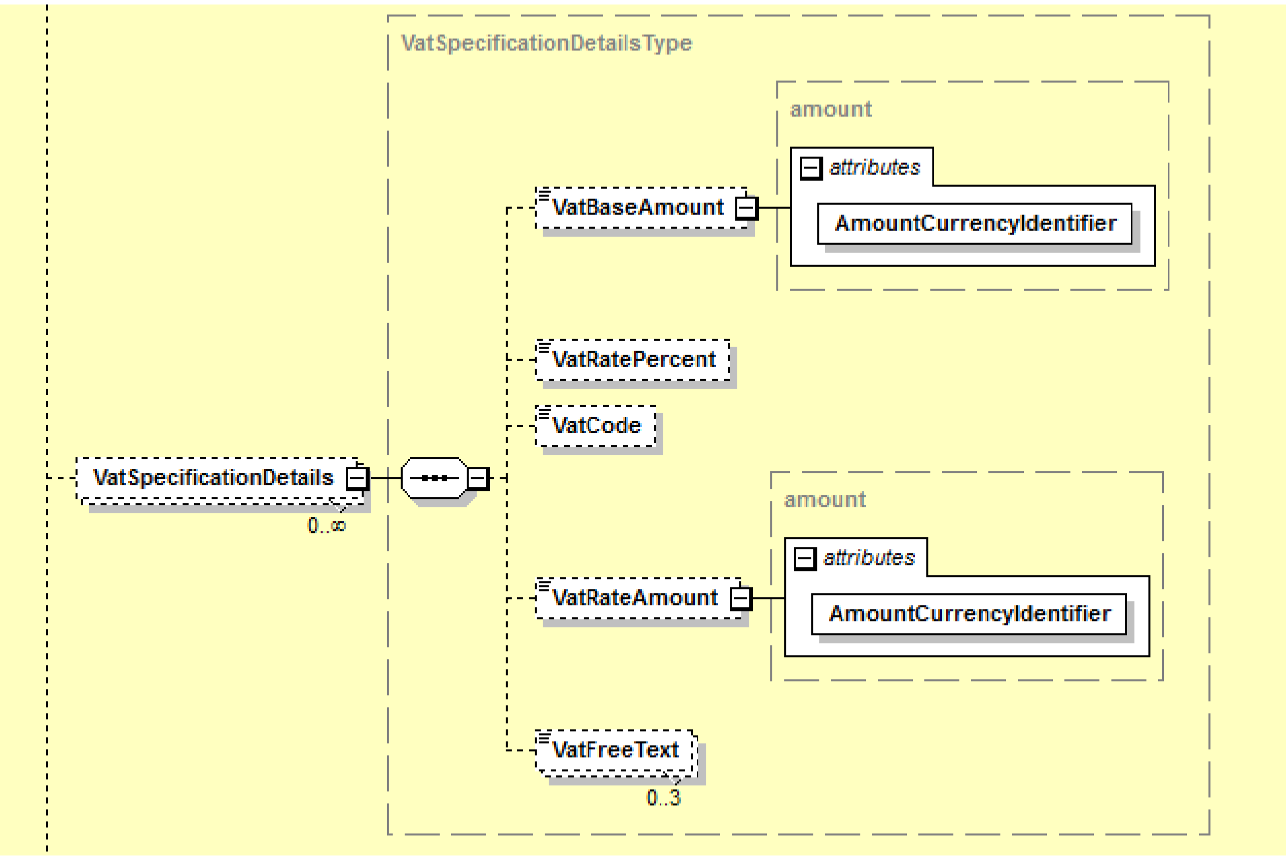
Depending on the Sender's invoicing method, the total amount of the invoice is calculated on the basis of either the delivered, ordered, or confirmed quantity.

InvoiceTotalVatIncludedAmount
InvoiceTotalVatIncludedAmount is calculated by adding up the tax-exempt invoice total (InvoiceTotalVatExcludedAmount) and the total amount of taxes of the invoice (InvoiceTotalVatAmount). In InvoiceTotalVatIncludedAmout field use to the total invoice amount, even if the bill has not VAT information.

InvoiceTotalVatExcludedAmount
InvoiceTotalVatExcludedAmount is calculated by adding up the tax-exempt net sums from the invoice rows (RowVatExcludedAmount).

InvoiceTotalVatAmount
InvoiceTotalVatAmount is calculated by adding up the tax-rate-specific tax amounts from the invoice's tax breakdown (VatRateAmount).

InvoiceVatSpecificationDetails aggregate information
VAT amounts shall be in accordance with the instructions of the Tax Administration.


VatSpecificationDetailsType
amount
attributes
AmountCurrencyIdentifier
VatBaseAmount
VatRatePercent
VatCode
VatSpecificationDetails
0..∞
amount
attributes
AmountCurrencyIdentifier
VatRateAmount
VatFreeText
0..3

VatBaseAmount
The total of RowVatExcludedAmount elements by VAT class.

VatRateAmount
The total of RowVatAmount elements by VAT class. The total amount must be calculated starting from the row level, otherwise the VAT amount will not match the row-level information.

VatSpecificationDetails can be repeated according to tax rates and currencies. In accordance with the guidelines by the taxation authority, taxes must be presented at least in euro in domestic invoices in Finland. The total amount is not obligatory in VatSpecificationDetails with VAT-exempt invoices.

Invoice tax breakdown / tax-rate-specific total tax amount: Tax-rate-specific total amount of taxes is primarily calculated by adding up the tax amounts of invoice rows (RowVatAmount) or, as a secondary option, by adding up the imputed tax amounts of invoice rows (RowVatExcludedAmount * RowVatRatePercent).

EpiInstructedAmount
The amount specified by the Sender as the amount to be paid.

18. Use of links in Finvoice e-invoices

The message can contain a link e.g. to the invoicer’s website.
Invoice messages can also include the service provider's link to a display or transaction service, which can then display e.g. an image of the invoice, promotional material or the invoice's attachments.

After the invoice has arrived at the online bank or web payment service, clicking on the link in the invoice will open an intermediate page which notifies the payer that by continuing he/she will be redirected outside of the service provider's service. The payer is only redirected after his/her confirmation. The linked page opens in a separate window, and the user cannot return to the service provider's service from it.

If the service behind the link contains anything more confidential than generic marketing material aimed at all customers, the Sender of the invoice must use a link created using the service provider's online bank link technology. The Sender shall see to it that all customer-specific information displayed with the link are sufficiently encrypted and secure.

The Sender is responsible for the links, their functioning, and the contents of its service, as well as for ensuring that using the links will not endanger the data protection of the bank, the customer or a third party. The service provider is entitled to prevent the use of links if they threaten transaction security.

18.1 Link created by the Sender

A Finvoice invoice includes several data fields, in which the Sender may insert a link. The link can lead e.g. to the Sender's public website. When a Finvoice standard-compliant style sheet is applied to visualise the invoice, the link is displayed as a clickable hyperlink.

The full link is placed in an url address element (e.g. InvoiceUrlText), and the corresponding url text is placed in the appropriate header element (e.g. InvoiceUrlNameText for InvoiceUrlText).

The Sender is responsible for the correctness and contents of the link.

A link created by the Sender may only be used to display generic communications and marketing material. Confidential information such as plain text social security number, card number, payer-customer's account number, or any other similar sensitive information may not be transmitted in the link data.

18.2 Link created by the service provider

The link created by the service provider is used improve the security of the information displayed behind the link and/or to display personalised information. The service provider creates the payer's link from the online bank or web payment service to the Sender's server or to the server of the display archive used by the Sender. The link can be used to direct the consumer to the Sender's transacting service.

The link created by the service provider is not intended for use with electronic invoices received in the online banks or web payment services of companies.

The link is created using online bank link technology. Its technical description is available on the Federation of Finnish Financial Services website.

The Sender, the transacting service and/or the company maintaining the display archive must agree on the use of the service with the service provider before starting the use of the service.

The Sender first enters the display archive identifier or transacting service identifier (business ID without hyphen; 8 characters) as agreed with the service provider, and after that enters the identifier which identifies the invoice attachments in the display archive (max 60 characters). Both data items are entered in the same field and separated with a “+” character. Maximum length of the element is 69 characters. All service providers must use the same identifiers.

Example:
<InvoiceUrlText>12345678+102030FK405060708091011121314156</InvoiceUrlText>

The Sender or the party maintaining the Sender’s display archive is responsible for constructing the functionalities that are necessary for interpreting the online bank links in its own service. On the basis of the information in the link, the Sender and/or the company maintaining the display or transacting service will deduce who should have access to the document or service behind the link. The service provider includes the relevant information for this together with the link.

While creating the link, the service provider shall verify whether the Sender and/or company maintaining the display archive or transacting service has a valid link contract.

The service provider's link may not be used for the purpose of forwarding the recipient to a third party service while authenticated.

19. Forwarding attachments in Finvoice forwarding service

19.1 Finvoice attachments in general

Finvoice attachments specify the information of Finvoice invoices sent between companies. The Finvoice attachment message can be used to include additional information that is related to the invoice. The primary objective is to forward supporting documents that are relevant for accounting or other information necessary for checking the invoice, which cannot be forwarded through the invoice message. Such information can be e.g. a consignment note or work description. In the Finvoice forwarding service, attachments may not be used to promote products or services.

Service providers shall state the schedule according to which they will support the forwarding of attachments in the Finvoice forwarding service.

Finvoice attachments are binary data that is sent separately from but in connection to a Finvoice invoice. The attachment is described using XML-format metadata.

- Each Finvoice invoice message may only be accompanied by one Finvoice attachment message at most.
- A Finvoice attachment message can contain 1 to 10 Finvoice attachments.
- Finvoice attachments and Finvoice attachment messages may not be reused: an attachment message and the attachment(s) it contains can only be attached to a single Finvoice invoice.
- An invoice message and its attachment message are linked by unique identifiers. The invoice message contains a reference to the attachment message, and the attachment message contains a reference to the invoice message.

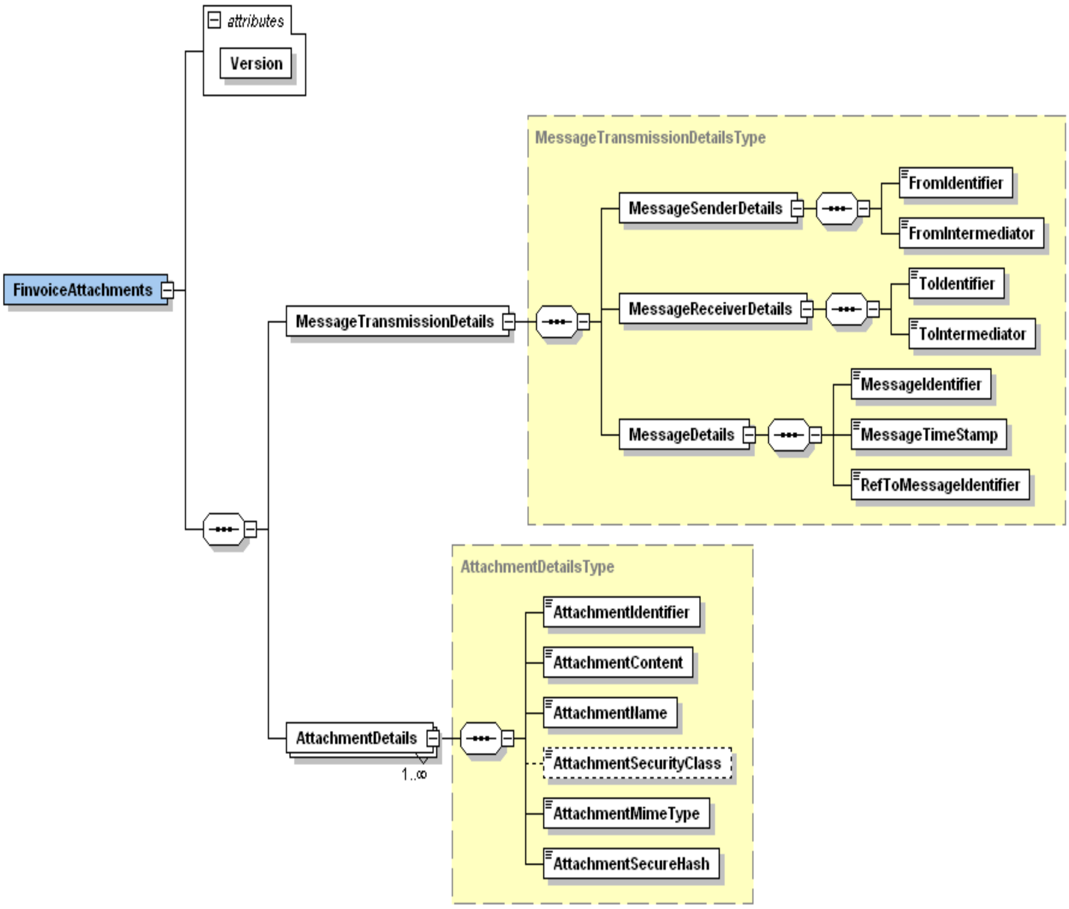
19.2 Sending Finvoice attachment messages

The Sender delivers Finvoice attachments to the service provider within a Finvoice attachment message. Attachment and invoice material are sent consecutively.

The service provider checks the sent material (e.g. virus scan) before accepting it. There are differences between service providers in the order, manner and amount of checking measures taken. If discrepancies are found in the contents of the attachment message, a acknowledgement message is formed (Finvoice ACK version 2.0).

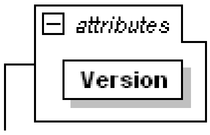
If the attachment message contains one incorrect attachment, the whole attachment message and its invoice message are rejected. Similarly, if the invoice message contains an error which results in rejection, the linked attachment message is also rejected.

19.3 Conceptual model of the attachment


attributes
Version
FinvoiceAttachments
MessageTransmissionDetailsType
MessageTransmissionDetails
MessageSenderDetails
FromIdentifier
FromIntermediator
MessageReceiverDetails
ToIdentifier
ToIntermediator
MessageDetails
MessageIdentifier
MessageTimeStamp
RefToMessageIdentifier
AttachmentDetailsType
AttachmentDetails
1..∞
AttachmentIdentifier
AttachmentContent
AttachmentName
AttachmentSecurityClass
AttachmentMimeType
AttachmentSecureHash

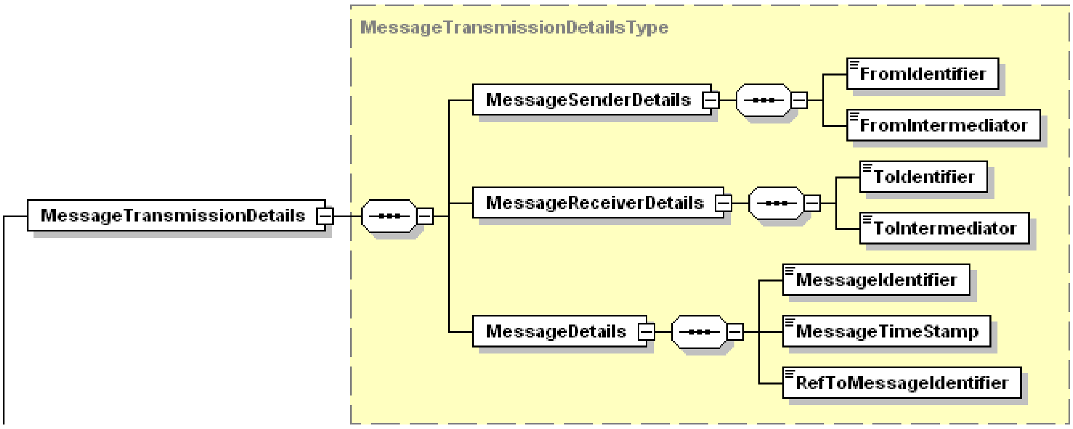
The structure of a Finvoice attachment message consists of the transmission details of the message and the details of the attachment. The aggregate information of the message displays the message's version number. An attachment message does not have a message-specific SOAP frame like Finvoice invoices.

19.3.1 Version


attributes
Version

The version number of a Finvoice attachment message is specified in the Version attribute of the message. The version number of an attachment message that adheres to these guidelines is 1.0.

19.3.2 MessageTransmissionDetails


MessageTransmissionDetailsType
MessageTransmissionDetails
MessageSenderDetails
FromIdentifier
FromIntermediator
MessageReceiverDetails
ToIdentifier
ToIntermediator
MessageDetails
MessageIdentifier
MessageTimeStamp
RefToMessageIdentifier

MessageTransmissionDetails is used to specify the details of the sender and receiver as well as the message's identification details.

The sender details of an attachment message (MessageSenderDetails) consist of the sender's identifier (FromIdentifier) and the identifier of the sender's monetary institution (FromIntermediator). The receiver details of an attachment message (MessageReceiverDetails) consist of the receiver's identifier (ToIdentifier) and the identifier of the receiver's monetary institution (ToIntermediator).

The sender and receiver details must be identical to the corresponding information in the SOAP frame of the invoice message.

The identifying information of the message is specified in the MessageDetails element.

MessageIdentifier specifies the unique identifier of the attachment message. The attachment message's identifier consists of the invoice identifier (MessageId) and a fixed character string (see section 19.7).
MessageTimeStamp element contains the message's creation time.
RefToMessageIdentifier contains the identifier (MessageId) of the invoice message that is linked to the attachment message.

19.3.3 AttachmentDetails

The details of an individual attachment are given in the AttachmentDetails element. There can be several attachments, in which case the AttachmentDetails element is repeated according to their number. The maximum number of attachments is ten, and their total size can be 1MB at most before encode. The number and size limitations of attachments are programmatically checked upon reception. The software that creates and/or sends the invoices must control that the maximum size or number of attachments in one message do not exceed the set limits.

An individual attachment's identifier is specified in the **AttachmentIdentifier** element, which is formed from the attachment message's identifier and the SHA1 checksum calculated from the contents of the attachment.

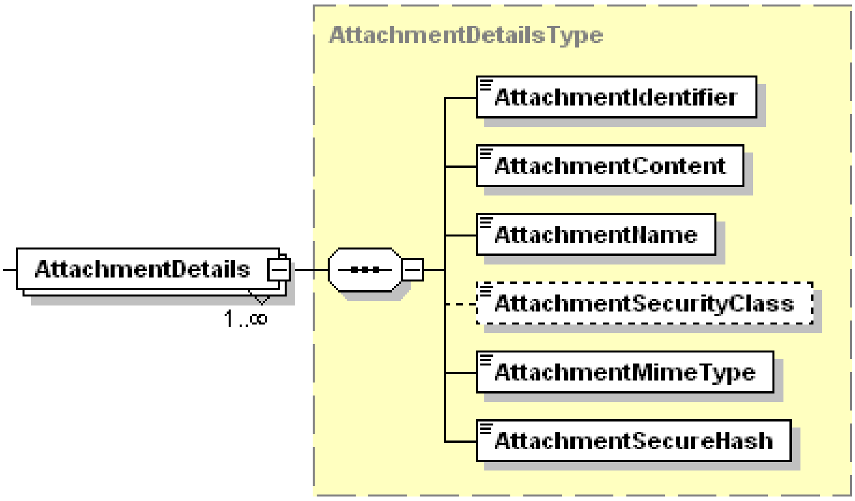
The actual attachment file is given base64 encoded in the **AttachmentContent** field.

The name of the attachment file (name.fileextension) is specified in **AttachmentName.**

If the sender has flagged the attachment as confidential, this is specified with an SEI code (e.g. SEI01) in the **AttachmentSecurityClass** field.

Type of the attachment message is specified in the **AttachmentMimeType** field. Permitted values are image/jpeg, image/png and application/pdf. The service provider checks the validity of the file type upon reception. The only permitted type for PDF documents is PDF/A.

The SHA1 checksum calculated from the base64 encoded contents of the attachment is given in the **AttachmentSecureHash** field. The checksum can be used to verify that the contents of the attachment file have not changed. It can also be used to identify the attachment. The checksum is used in the attachment identifier.



19.4 Use of message structures

The attachment message must be compatible with XML 1.0 specification.

Attachment messages do not have the same restrictions as Finvoice invoices regarding the use of tags, line breaks or line lengths:

- Tag pairs do not need to be on separate lines.
- Line breaks can be used within the limits permitted by XML specification.

Attachment messages must comply with the following requirements:

- Attachment messages must be XML documents that comply with the FinvoiceAttachment schema.

The character set used in attachment messages is ISO-8859-15.

19.5 Permitted file types

The MIME type of the attachment's binary data and the file extension are checked when the Finvoice attachment is sent. Permitted file types are described below.

MIME type	File extension	Description
image/jpeg	jpg, jpeg	Portable image file format
image/png	png	Portable image file format
application/pdf	pdf	Portable document format

Table: Permitted file types

MIME type names must be official media types as defined by IANA: http://www.iana.org/assignments/media-types/index.html.

The PDF/A format must be used for PDF documents. Service providers may reject PDF documents that contain video files, scripts or other elements that are potential security risks.

19.6 Data security policies

Finvoice attachment message contains a SHA1 hash (checksum) generated from Base64-encoded binary data. The format used in Finvoice attachments is hex (small capitals).

For example, the character string "Finvoice" generated as a SHA1 hash:
hex: 8ca2f7a6d8d94cc94da2d0ce9ff13cbdb5341053

19.7 Reference processing

The use of attachments requires the implementation of attachment references for invoice messages. The reference to an attachment is specified in the AttachmentMessageDetails/AttachmentMessageIdentifier element, which contains the identifier of the attachment message (MessageIdentifier). The attachment message respectively refers to the invoice message in the RefToMessageIdentifier element, which contains the identifier of the invoice message (SOAP/MessageId). This process links the invoice and attachment messages together.

The identifier of the attachment message is formed from the identifier of the invoice by adding two colons "::" and the fixed text "attachments". The attachment message identifier is thus in the form
invoice_id::attachments, e.g. "XS0604.48GPB2212::attachments".

The service provider checks the cross-reference between the invoice and attachment message upon reception. The sender and recipient details of invoice and attachment messages must also correspond to each other.

Service providers will reject an attachment message with incomplete or incorrect reference data during processing.

If the invoice or attachment containing the reference is rejected, its counterpart is also rejected.

19.8 Security labels in attachments

Attachments can also have security labels, which allows the Receiver to process them differently from the usual procedure, if necessary. The service provider does not encrypt security labelled attachments or forward encrypted, security labelled attachments.

The security label is specified in the attachment's metadata in the AttachmentSecurityClass element.

19.9 Attachment message model

```
<?xml version="1.0" encoding="ISO-8859-15" ?>
<FinvoiceAttachments xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="FinvoiceAttachments.xsd" Version="1.0">
    <MessageTransmissionDetails>
       <MessageSenderDetails>
          <FromIdentifier>FI4043091020117999</FromIdentifier>
          <FromIntermediator>HELSFIHH</FromIntermediator>
       </MessageSenderDetails>
       <MessageReceiverDetails>
          <ToIdentifier>003702048999</ToIdentifier>
          <ToIntermediator>003714377999</ToIntermediator>
       </MessageReceiverDetails>
       <MessageDetails>
          <MessageIdentifer>XS0604.48GPB2/212::attachments</MessageIdentifer>
          <MessageTimeStamp>2012-06-04T15:54:40+03:00 </MessageTimeStamp>
          <RefToMessageIdentifier>XS0604.48GPB2/212</RefToMessageIdentifier>
       </MessageDetails>
    </MessageTransmissionDetails>
    <AttachmentDetails>
       <AttachmentIdentifier>YV1199015::attachments::a0824b7488d56e01cb98c9082ec
       320489e  e99e26 </AttachmentIdentifier>
          <AttachmentContent>iVBORw0KGgoAAAANSUhEUgAAAAwAAAAMCAYAAAB
          WdVznAAAAAXNSR0IArs4c6QAAAPxJRFUKM+FkUGugkAQRF/DSEQWchnjKJ
          yEPXGjIZ5GY7yLF3DIVdTghiI3RsCfX0kvOtWvq5M2SWIgMwPgh0X03XRdR1EU
          TKdTkiBe0/Xdf1IwwQzY7FYAHC9Xgkh/J3QNA1mRI3XbDYb4jimaZr+TfrSfD7Xb
          DbT/X5X27bK81x5nn+P6AOcz2cBqqrqY+73e00mE51OpzGwXq8F6HK5KISgEIJ
          ut5ucc1qtVmPAOSegV2mayszknOsD2+1WgMxsBEVRJEC73U6SZJKUZR
          kAz+eTX8qyDDPj8XgQHQ4HXq8X3vvPZ4cfXi6XtG3L8XiEsixIZvpPgIqi0BvI+/Yx
          t3r4KgAAAABJRU5ErkJggg==</AttachmentContent>
       <AttachmentName>vokaali.png</AttachmentName>
       <AttachmentSecurityClass>SEI01</AttachmentSecurityClass>
       <AttachmentMimeType>image/png</AttachmentMimeType>
       <AttachmentSecureHash>a0824b7488d56e01cb98c9082ec320489ee99e26
       </AttachmentSecureHash>
    </AttachmentDetails>
</FinvoiceAttachments>
```

20. Description of the SOAP frame

The frame is based on a recommendation by the ebXML project where the message is passed using the SOAP envelope structure. The use of frames in Finvoice transmission deviates from the ebXML 2.0 recommendation with regard to the use of the To and From elements, because the decision was made before the final approval of the ebXML recommendation.

Messages can be sent and received using the same security technology and communication channel used for other message traffic with the party in question.

Note! One frame is always associated with exactly one message, such as an invoice.

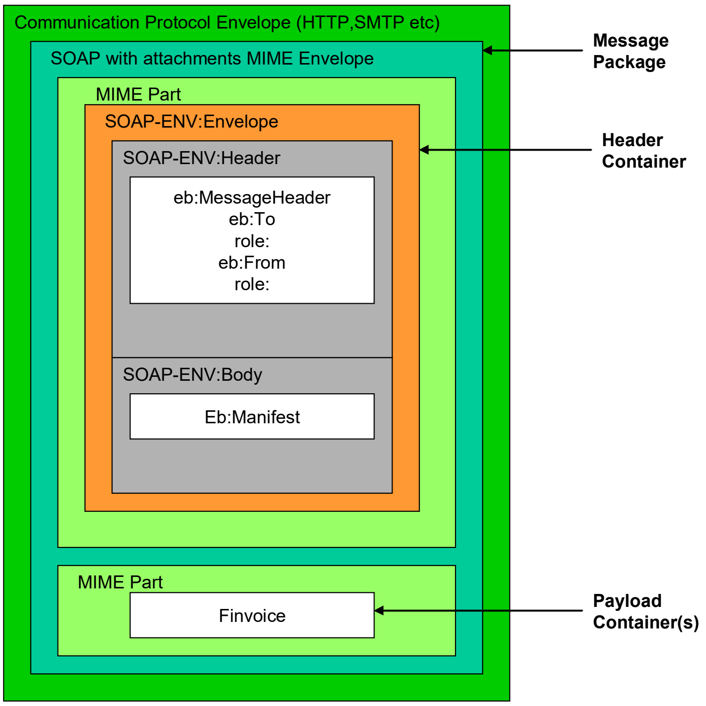
The file sent to the service provider may include several Finvoice messages. Each message must include a transmission frame (SOAP) specifying the Sender, recipient and service provider data. The service provider routes the message to its recipient on the basis of frame data.

The frame structure enables the use of digital signatures when required, if they will be implemented in the future.

The frames of Finvoice material can be validated against FFI’s SOAP schema.

20.1 Structure of the SOAP frame

The message structure includes a Mime multipart structure that contains designated parts for SOAP, the ebXML header and Finvoice. The Mime multipart structure is not used when forwarding invoices through service providers. The actual invoice is transmitted outside the frame.
The figure illustrates the message structure. The header part includes the identification data of the Sender(s) and the Receiver. The actual XML message reference is in the SOAP-ENV:Body. The frame is SOAP 1.1 compliant. In SOAP 1.2, the namespace must be: http://www.w3.org/2001/12/soap-envelope and mustUnderstand="true", but no other changes are required.


Communication Protocol Envelope (HTTP,SMTP etc)
SOAP with attachments MIME Envelope
MIME Part
SOAP-ENV:Envelope
SOAP-ENV:Header
eb:MessageHeader
eb:To
role:
eb:From
role:
SOAP-ENV:Body
Eb:Manifest
MIME Part
Finvoice
Message Package
Header Container
Payload Container(s)

Elements related to invoice signing can be added to the frame later.

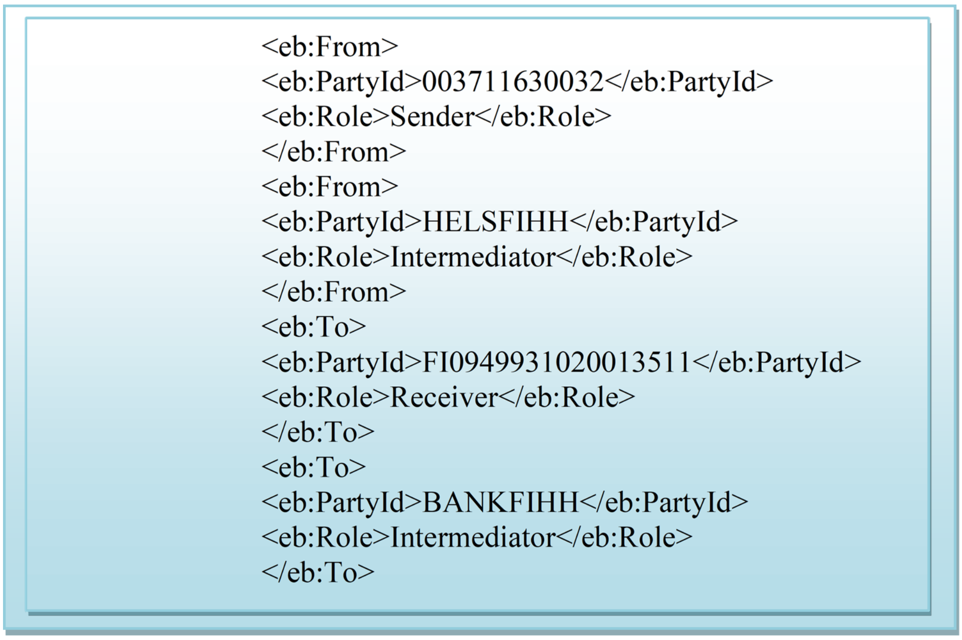
20.2 An example of a frame

The file starts at the <SOAP-ENV:.. element.

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:eb="http://www.oasis-
open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
<SOAP-ENV:Header>
<eb:MessageHeader xmlns:eb="http://www.oasis-open.org/committees/ebxml-
msg/schema/msg-header-2_0.xsd" SOAP-ENV:mustUnderstand="1">
<eb:From>
<eb:PartyId>003711630032</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>FI0949931020013511</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>BANKFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<eb:CPAId>yoursandmycpa</eb:CPAId>
```

```
<eb:ConversationId></eb:ConversationId>
<eb:Service>Routing</eb:Service>
<eb:Action>ProcessInvoice</eb:Action>
<eb:MessageData>
<eb:MessageId>5017</eb:MessageId>
<eb:Timestamp>2012-2-16T11:34:36</eb:Timestamp>
<eb:RefToMessageId/>
</eb:MessageData>
</eb:MessageHeader>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
<eb:Manifest eb:id="Manifest" eb:version="2.0">
<eb:Reference eb:id="Finvoice" xlink:href="5017">
<eb:schema eb:location="http://www.finvoice.info/finvoice.xsd" eb:version="2.0"/>
</eb:Reference>
</eb:Manifest>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding="iso-8859-15"?>
<?xml-stylesheet href="Finvoice.xsl" type="text/xsl"?>
<Finvoice Version="1.3">
```

20.3 Parts of the example and their descriptions



```
<eb:From>
<eb:PartyId>003711630032</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>FI0949931020013511</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>BANKFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
```

The From and To tags are always associated with the eb:Role tag that indicates the role of the Sender/Receiver. In practice, the invoice recipient delivers the recipient's own identifier to the Sender in the Receiver role, and the identifier of any service provider in the Intermediator role. If the invoice is sent directly to the Receiver, the Receiver's service provider is not required or it may be ignored.

Intermediators use the identifiers specified in the table below. Their eb:Role is Intermediator.

The From and To parties can use either identifiers agreed with an Intermediator or mutually agreed identifiers. An identifier can be, for example, EDI, IBAN or a designated identifier issued by the invoice operator or Intermediator. If the customer uses an invoice operator, he/she should agree on the address to be used with his operator.

The data regarding the parties must be specified in the following order:

- Sender
- Intermediator (Sender)
- Receiver
- Intermediator (Receiver)

The identifiers of the various actors affect SOAP routing. SOAP will always go one step at a time towards the destination. eb:From and eb:To identify the original Sender and Receiver, but both parties may have an assistant in the Intermediator role, who will receive the message first and then forward it to the final recipient (compare to the following figure).

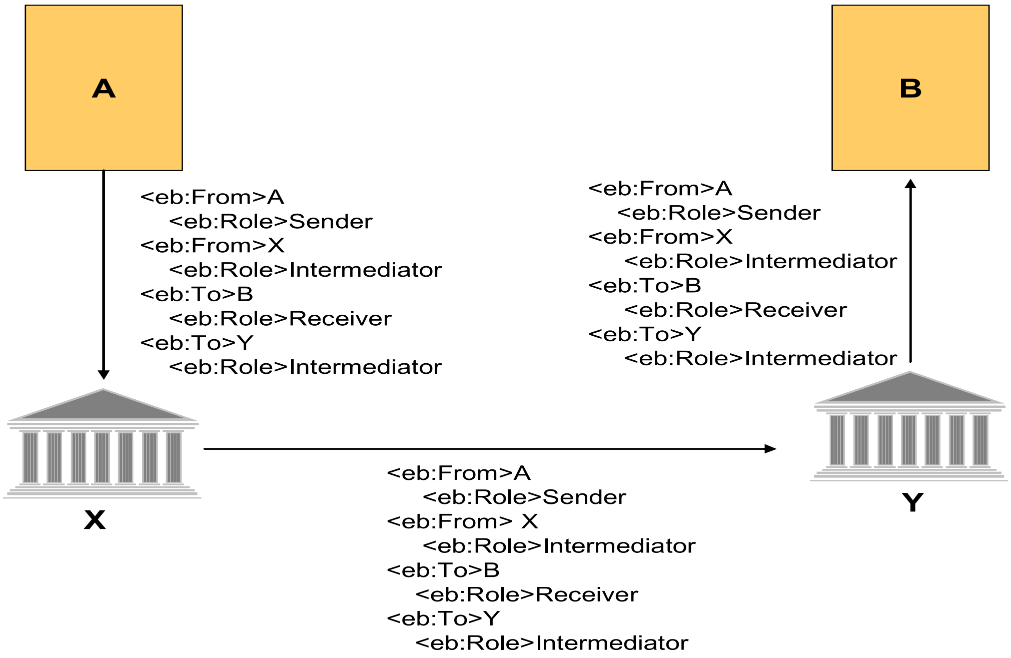
The Finvoice forwarding service Intermediator codes of the service providers in the Finvoice forwarding service:

Intermediators	Name
AABAFI22	Bank of Åland
DABAFIHH	Danske Bank
DNBAFIHX	DNB
HANDFIHH	Handelsbanken
HELSFIHH	Aktia
ITELFIHH	Central Bank of Savings Banks Finland, Savings Banks and Oma Säästöpankki
NDEAFIHH	Nordea Bank
OKOYFIHH	Co-operative banks ja Pohjola Bank
POPFFI22	Bonum Bank ja Local Co-operative banks
SBANFIHH	S-Bank

Sender and Receiver Information:

From	Description
ovt ly IBAN nn….	Finnish EDI identifier, country code + Business ID + specifier 0037+01234567+00000 e.g. 00370123456700000 Business Identity Code (Business ID) Account number in international format (IBAN) An identifier agreed between the Service Provider (Intermediator) and the customer
To	**Description**
ovt ly IBAN nn….	Finnish EDI identifier, country code + Business ID + specifier 0037+01234567+00000 e.g. 00370123456700000 Business Identity Code (Business ID) Account number in international format (IBAN) An identifier agreed between the Service Provider (Intermediator) and the customer

An Example of using the From and To Elements


A
B
<eb:From>A
<eb:Role>Sender
<eb:From>X
<eb:Role>Intermediator
<eb:To>B
<eb:Role>Receiver
<eb:To>Y
<eb:Role>Intermediator
<eb:From>A
<eb:Role>Sender
<eb:From>X
<eb:Role>Intermediator
<eb:To>B
<eb:Role>Receiver
<eb:To>Y
<eb:Role>Intermediator
X
Y
<eb:From>A
<eb:Role>Sender
<eb:From> X
<eb:Role>Intermediator
<eb:To>B
<eb:Role>Receiver
<eb:To>Y
<eb:Role>Intermediator

X= Sender's Service Provider
Y= Invoice recipient's Service Provider

<eb:CPAId>yoursandmycpa </eb:CPAId>

The CPAid is not used in Finvoice forwarding, but is reserved for ebXML-compliant registration services in the future. The value shall be the constant "yoursandmycpa".

ConversationId is not used when sending or receiving through the service providers. ConversationId is a technical identifier uniquely identifying the sent message, used in communication between machines.

Service and Action are intended to be used by each Receiver for their own purposes and may mean different things to different Receivers. Identification data associated with the message (time stamp and identifier) is specified in MessageData. **The MessageId is a unique identifier of the invoice that can be used for directing any error feedback**. RefToMessageId is intended for the processing of an acknowledgement message and can be used to refer to the original message.

```
<SOAP-ENV:Body>
<eb:Manifest eb:id="Manifest" eb:version="2.0">
<eb:Reference eb:id="Finvoice" xlink:href="5017">
<eb:schema
eb:location="http://www.finvoice.info/finvoice.xsd"
eb:version="2.0"/>
</eb:Reference>
</eb:Manifest>
</SOAP-ENV:Body>
```

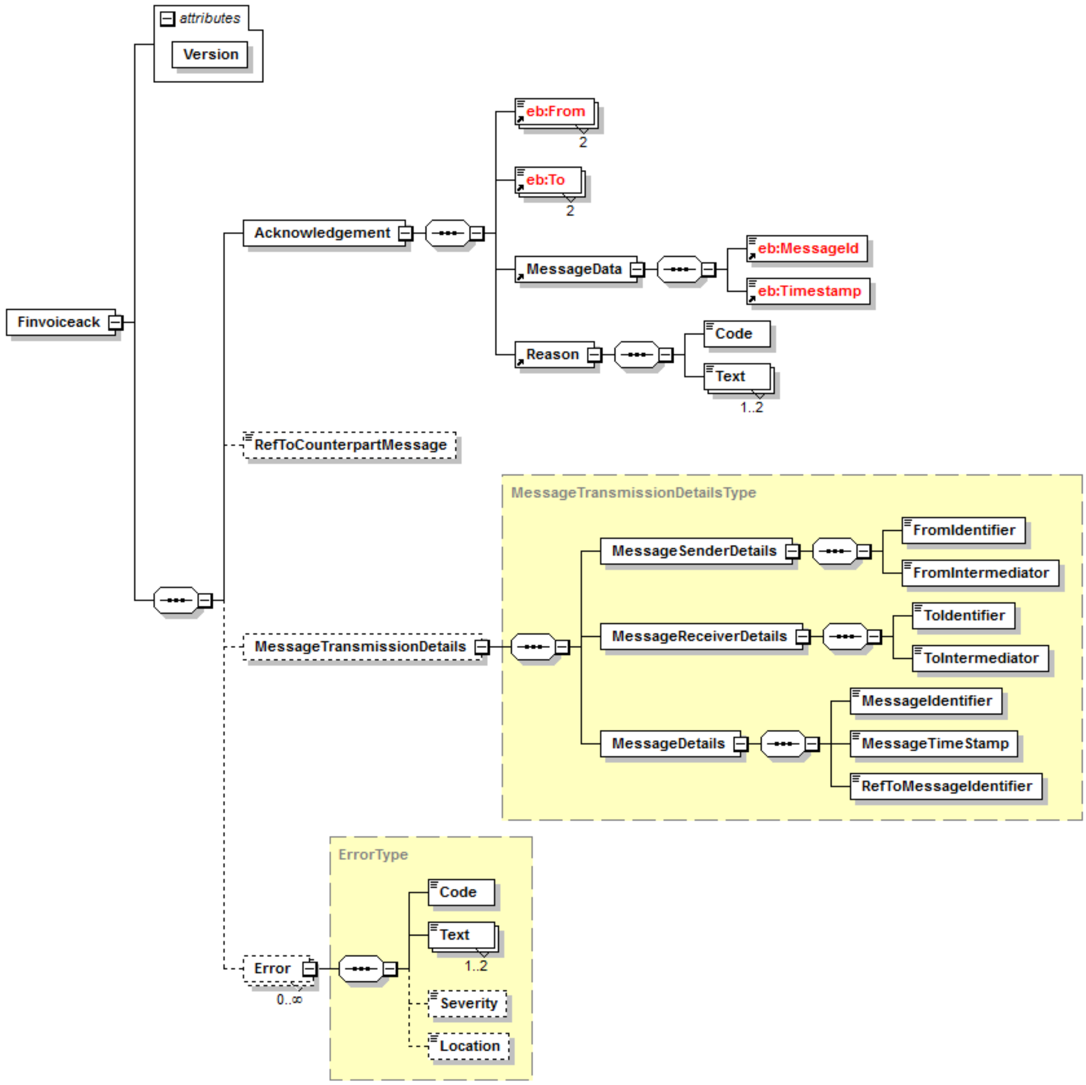
Reference to the actual invoice is made in SOAP-ENV:Body. Reference eb:Id identifies the reference specified in the href field, in this case the Finvoice number. The 5017 value can be equal to eb:MessageId. The maximum length of MessageId is 48 characters. The Envelope end tag is the last one.

21. Acknowledgement Message

Acknowledgement message can be used to respond to every transmission. The service providers **participating in the Finvoice forwarding service** will only send an acknowledgement message if the Finvoice message cannot, for some reason, be forwarded or delivered to its receiver. If the Finvoice invoice message includes a separate Finvoice attachment message, only one acknowledgement message is created for the invoice–attachment pair. These guidelines apply to acknowledgement message version Finvoiceack 2.0.

21.1 Conceptual model of the acknowledgement message

An acknowledgement message consists of the SOAP frame and the FinvoiceAck message. Structure of the SOAP frame is described in section 20. The FinvoiceAck message schema is available at www.finvoice.info.

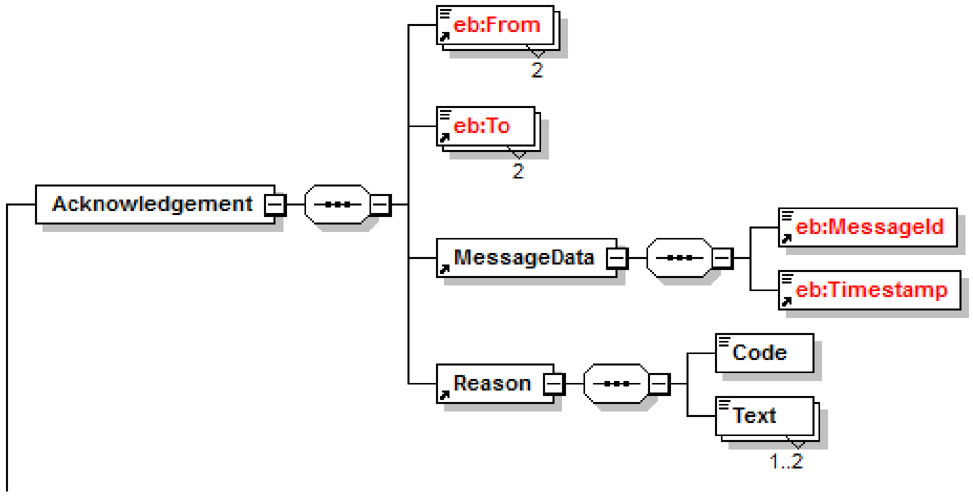

attributes
Version
Finvoiceack
Acknowledgement
eb:From
2
eb:To
2
MessageData
eb:MessageId
eb:Timestamp
Reason
Code
Text
1..2
RefToCounterpartMessage
MessageTransmissionDetailsType
MessageTransmissionDetails
MessageSenderDetails
FromIdentifier
FromIntermediator
MessageReceiverDetails
ToIdentifier
ToIntermediator
MessageDetails
MessageIdentifier
MessageTimeStamp
RefToMessageIdentifier
ErrorType
Error
0..∞
Code
Text
1..2
Severity
Location

21.1.1 Version

attributes
Version

The version number of the acknowledgement message is displayed in the Version attribute. Acknowledgement messages that adhere to these guidelines have the version number 2.0.Version 2.0 contains the version 1.0 structure as is, so the newer version is backward compatible. An acknowledgement message can be specified with version number 1.0, in which case the acknowledgement message consists of the SOAP frame and the Acknowledgement element of the Finvoiceack message. With version number 2.0, the acknowledgement message can also contain the RefToCounterpartMessage, MessageTransmissionDetails and Error elements. RefToCounterpartMessage element is only used when an attachment message is linked to the invoice message.

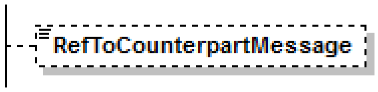
21.1.2 Acknowledgement – original message details



The Acknowledgement element has been in use since acknowledgement message version 1.0.
The Acknowledgement element contains the details of the original message, to which the acknowledgement refers to.

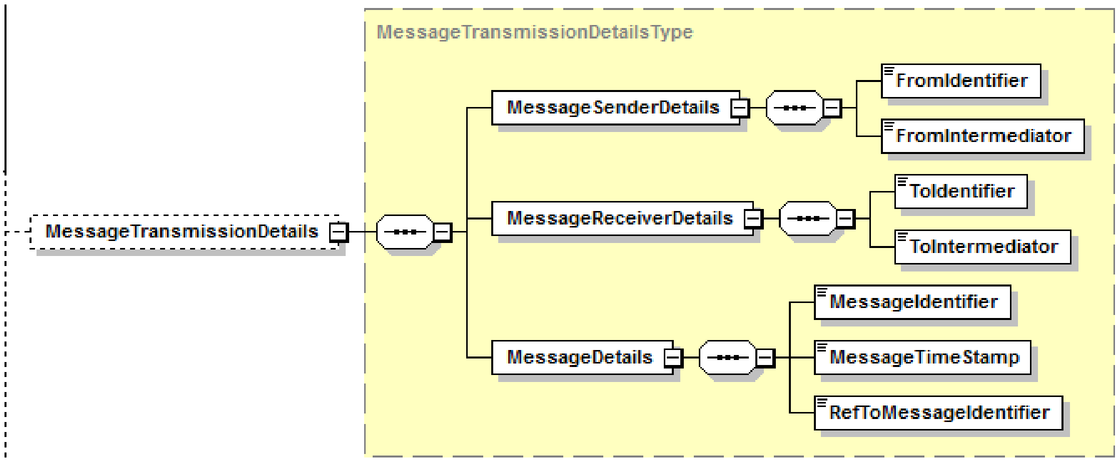
- **Eb:From** contains the original message's sender details
  - Sender: PartyId field specifies the sender's identifier, and Role field specifies the role as "Sender"
  - Sender's intermediator: PartyId field specifies the identifier of the sender's intermediator, and Role field specifies the role as "Intermediator"
- **Eb:To** contains the original message's receiver details
  - Receiver: PartyId field specifies the receiver's identifier, and Role field specifies the role as "Receiver"
  - Receiver's intermediator: PartyId field specifies the identifier of the receiver's intermediator, and Role field specifies the role as "Intermediator"
- **MessageData** element contains the original message's identifier and time stamp
  - MessageId: Original message's identifier
  - Timestamp: Original message's time stamp
- **Reason** element contains the error code and description (see section 21.2)
  - Code: Error code
  - Text: Description

21.1.3 RefToCounterpartMessage – reference to the message's counterpart



RefToCounterpartMessage element is new data in the acknowledgement message. The information is only used in the acknowledgement message to an invoice with an attachment. RefToCounterpartMessage element can be used to specify the identifier of another message linked to the message to which the acknowledgement message is being sent.

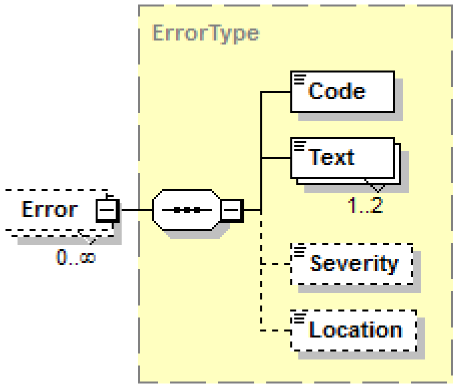
21.1.4 *MessageTransmissionDetails – details corresponding to SOAP frame*


MessageTransmissionDetailsType
MessageTransmissionDetails
MessageSenderDetails
FromIdentifier
FromIntermediator
MessageReceiverDetails
ToIdentifier
ToIntermediator
MessageDetails
MessageIdentifier
MessageTimeStamp
RefToMessageIdentifier

MessageTransmissionDetails element is a new data group. It is used for the corresponding data as the SOAP frame of the acknowledgement message. The element is optional. The element is not used with acknowledgement message version 1.0.

- **MessageSenderDetails** element contains the acknowledgement message's sender details
    - Sender: FromIdentifier field contains the identifier of the acknowledgement message's sender
    - Sender's intermediator: FromIdentifier field contains the identifier of the acknowledgement message's sender's intermediator
- **MessageReceiverDetails** element contains the acknowledgement message's receiver details
    - Receiver: ToIdentifier field contains the identifier of the acknowledgement message's receiver
    - Receiver's intermediator: ToIntermediator field contains the identifier of the acknowledgement message's receiver's intermediator
- **MessageDetails** element contains the details of the acknowledgement message and a reference to the original message to which the acknowledgement message is related to
    - MessageIdentifier field contains the acknowledgement message's identifier
    - MessageTimeStamp field contains the time stamp of the acknowledgement message's creation
    - RefToMessageIdentifier field contains the identifier of the original message to which the acknowledgement message is related (nb. RefToCounterpartMessage)

21.1.5 Error – additional error message



Error is a new optional data element in the acknowledgement message. The Error element makes it possible to make several error messages, or can be used to further specify the error message in the Reason element. The message's error code and its description are primarily given in the Reason element:

Code contains the error code
Text contains the description of the error code
Severity states the severity of the error, permitted value is "Error"
The Severity element is optional and its use depends on the service provider
Location can be used to state in which part of the message the error was found
The Location element is optional and its use depends on the service provider
Location field can be used for example to display the attachment identifier, if the error that caused rejection concerns only a single attachment.

21.1.6 Acknowledgement message models

Acknowledgement message (v1.0) for invoice message v1.3

Contains only the SOAP frame and the Acknowledgement element of the Finvoiceack message.

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:eb="http://www.oasis-
open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
<SOAP-ENV:Header>
<eb:MessageHeader xmlns:eb="http://www.oasis-open.org/committees/ebxml-
msg/schema/msg-header-2_0.xsd" SOAP-ENV:mustUnderstand="1"
eb:id="20030222133003285">
<eb:From>
<eb:PartyId>003702048999</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>003714377999</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
```

```
<eb:To>
<eb:PartyId>FI4043091020117999</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<eb:CPAId>yoursandmycpa</eb:CPAId>
<eb:ConversationId></eb:ConversationId>
<eb:Service>Routing</eb:Service>
<eb:Action>ProcessInvoice</eb:Action>
<eb:MessageData>
<eb:MessageId>1297326762_3</eb:MessageId>
<eb:Timestamp>2011-02-10T10:32:41+02</eb:Timestamp>
<eb:RefToMessageId>YV1199015</eb:RefToMessageId>
</eb:MessageData>
</eb:MessageHeader>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
<eb:Manifest eb:id="Manifest" eb:version="2.0">
<eb:Reference eb:id="Finvoice" xlink:href="1297326762_3">
<eb:schema eb:location="http://www.finvoice.info/finvoice.xsd" eb:version="2.0"/>
</eb:Reference>
</eb:Manifest>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding="ISO-8859-15"?>
<!DOCTYPE Finvoiceack SYSTEM "Finvoiceack.dtd">
<?xml-stylesheet type="text/xsl" href="Finvoiceack.xsl"?>
<Finvoiceack Version="1.0" xmlns:eb="http://www.oasis-
open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd" xmlns=
"http://www.pankkiyhdistys.fi/verkkolasku/finvoice/finvoiceack.xsd">
<Acknowledgement>
<eb:From>
<eb:PartyId>FI4043091020117999</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>003702048999</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>003714377999</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<MessageData>
<eb:MessageId>YV1199015</eb:MessageId>
<eb:Timestamp>2011-02-10T00:30:01+02</eb:Timestamp>
</MessageData>
<Reason>
```

```
<Code>2</Code>
<Text>Receiver not found</Text>
</Reason>
</Acknowledgement>
</Finvoiceack>
```

Acknowledgement message (v2.0) for invoice message without attachment (v2.0)

Contains the MessageTransmissionDetails element

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:eb="http://www.oasis-
open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
<SOAP-ENV:Header>
<eb:MessageHeader xmlns:eb="http://www.oasis-open.org/committees/ebxml-
msg/schema/msg-header-2_0.xsd" SOAP-ENV:mustUnderstand="1"
eb:id="20030222133003285">
<eb:From>
<eb:PartyId>003702048999</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>003714377999</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>FI4043091020117999</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<eb:CPAId>yoursandmycpa</eb:CPAId>
<eb:ConversationId></eb:ConversationId>
<eb:Service>Routing</eb:Service>
<eb:Action>ProcessInvoice</eb:Action>
<eb:MessageData>
<eb:MessageId>1297326762_3</eb:MessageId>
<eb:Timestamp>2011-02-10T10:32:41+02</eb:Timestamp>
<eb:RefToMessageId>YV1199015</eb:RefToMessageId>
</eb:MessageData>
</eb:MessageHeader>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
<eb:Manifest eb:id="Manifest" eb:version="2.0">
<eb:Reference eb:id="Finvoice" xlink:href="1297326762_3">
<eb:schema eb:location="http://www.finvoice.info/finvoice.xsd" eb:version="2.0"/>
</eb:Reference>
</eb:Manifest>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding=" ISO-8859-15"?>
<!--Sample XML file generated by XMLSpy v2010 rel. 3 sp1
(http://www.altova.com)-->
```

```
<Finvoiceack Version="2.0"
xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-
header-2_0.xsd" xmlns=
"http://www.pankkiyhdistys.fi/verkkolasku/finvoice/finvoiceack.xsd">
<Acknowledgement>
<:Acknowledgement>
<eb:From>
<eb:PartyId>FI4043091020117999</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>003702048999</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>003714377999</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<MessageData>
<eb:MessageId> YV1199015</eb:MessageId>
<eb:Timestamp>2011-02-10T07:00:00+02</eb:Timestamp>
<MessageData>
<Reason>
<Code>2</Code>
<Text>Vastaanottajaa ei löydy</Text>
<Text>a</Text>
<Reason>
<Acknowledgement>
<MessageTransmissionDetails>
<MessageSenderDetails>
<FromIdentifier>003702048999</FromIdentifier>
<FromIntermediator>003714377999</FromIntermediator>
</MessageSenderDetails>
<MessageReceiverDetails>
<ToIdentifier>FI4043091020117999</ToIdentifier>
<ToIntermediator>HELSFIHH</ToIntermediator>
</MessageReceiverDetails>
<MessageDetails>
<MessageIdentifier>1297326762_3</MessageIdentifier>
<MessageTimeStamp>2011-02-10T10:32:41+02</MessageTimeStamp>
<RefToMessageIdentifier>YV1199015</RefToMessageIdentifier>
</MessageDetails>
</MessageTransmissionDetails>
```

Acknowledgement message (v2.0) for invoice message (v2.0) with attachment

Includes Error element. Error is related to the entire attachment message, not an individual attachment.

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
```

```
xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:eb="http://www.oasis-
open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
<SOAP-ENV:Header>
<eb:MessageHeader xmlns:eb="http://www.oasis-open.org/committees/ebxml-
msg/schema/msg-header-2_0.xsd" SOAP-ENV:mustUnderstand="1"
eb:id="20030222133003285">
<eb:From>
<eb:PartyId>003702048999</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>003714377999</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>FI4043091020117999</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<eb:CPAId>yoursandmycpa</eb:CPAId>
<eb:ConversationId></eb:ConversationId>
<eb:Service>Routing</eb:Service>
<eb:Action>ProcessInvoice</eb:Action>
<eb:MessageData>
<eb:MessageId>1297326762_3</eb:MessageId>
<eb:Timestamp>2011-02-10T10:32:41+02</eb:Timestamp>
<eb:RefToMessageId>YV1199015</eb:RefToMessageId>
</eb:MessageData>
</eb:MessageHeader>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
<eb:Manifest eb:id="Manifest" eb:version="2.0">
<eb:Reference eb:id="Finvoice" xlink:href="1297326762_3">
<eb:schema eb:location="http://www. finvoice.info /finvoice.xsd" eb:version="2.0"/>
</eb:Reference>
</eb:Manifest>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding="UTF-8" ?>
<Finvoiceack Version="2.0" xsi:schemaLocation=
"http://www.pankkiyhdistys.fi/verkkolasku/finvoice/finvoiceack.xsd Finvoiceack.xsd"
xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-
header-2_0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<Acknowledgement>
<eb:From>
<eb:PartyId>FI4043091020117999</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
```

```
          </eb:From>
          <eb:To>
          <eb:PartyId>003702048999</eb:PartyId>
          <eb:Role>Receiver</eb:Role>
          </eb:To>
          <eb:To>
          <eb:PartyId>003714377999</eb:PartyId>
          <eb:Role>Intermediator</eb:Role>
          </eb:To>
          <MessageData>
          <eb:MessageId> YV1199015</eb:MessageId>
          <eb:Timestamp>2011-02-10T07:00:00+02</eb:Timestamp>
          </MessageData>
          <Reason>
          <Code>12</Code>
          <Text>Invoice message rejected, because attachment message could not be
found or was rejected</Text>
          <Text>a</Text>
          </Reason>
          </Acknowledgement>
          <RefToCounterpartMessage>YV1199015::attachments</RefToCounterpartMessa
ge>
          <MessageTransmissionDetails>
          <MessageSenderDetails>
          <FromIdentifier>003702048999</FromIdentifier>
          <FromIntermediator>003714377999</FromIntermediator>
          </MessageSenderDetails>
          <MessageReceiverDetails>
          <ToIdentifier>FI4043091020117999</ToIdentifier>
          <ToIntermediator>HELSFIHH</ToIntermediator>
          </MessageReceiverDetails>
          <MessageDetails>
          <MessageIdentifier>1297326762_3</MessageIdentifier>
          <MessageTimeStamp>2011-02-10T10:32:41+02</MessageTimeStamp>
          <RefToMessageIdentifier> YV1199015</RefToMessageIdentifier>
          </MessageDetails>
          </MessageTransmissionDetails>
          <Error>
          <Code>16</Code>
          <Text>Attachment message ID already used</Text>
          <Severity>ERROR</Severity>
          </Error>
          </Finvoiceack>
```

Acknowledgement message (v2.0) for invoice message (v2.0) with attachment

Includes Error element. Error is in an individual attachment.

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:eb="http://www.oasis-
open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
<SOAP-ENV:Header>
<eb:MessageHeader xmlns:eb="http://www.oasis-open.org/committees/ebxml-
msg/schema/msg-header-2_0.xsd" SOAP-ENV:mustUnderstand="1"
eb:id="20030222133003285">
<eb:From>
<eb:PartyId>003702048999</eb:PartyId>
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>003714377999</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>FI4043091020117999</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<eb:CPAId>yoursandmycpa</eb:CPAId>
<eb:ConversationId></eb:ConversationId>
<eb:Service>Routing</eb:Service>
<eb:Action>ProcessInvoice</eb:Action>
<eb:MessageData>
<eb:MessageId>1297326762_3</eb:MessageId>
<eb:Timestamp>2011-02-10T10:32:41+02</eb:Timestamp>
<eb:RefToMessageId>YV1199015</eb:RefToMessageId>
</eb:MessageData>
</eb:MessageHeader>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
<eb:Manifest eb:id="Manifest" eb:version="2.0">
<eb:Reference eb:id="Finvoice" xlink:href="1297326762_3">
<eb:schema eb:location="http://www. finvoice.info/finvoice.xsd" eb:version="2.0"/>
</eb:Reference>
</eb:Manifest>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding="UTF-8" ?>
<Finvoiceack Version="2.0" xsi:schemaLocation=
"http://www.pankkiyhdistys.fi/verkkolasku/finvoice/finvoiceack.xsd Finvoiceack.xsd"
xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-
header-2_0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<Acknowledgement>
<eb:From>
<eb:PartyId>FI4043091020117999</eb:PartyId>
```

```
<eb:Role>Sender</eb:Role>
</eb:From>
<eb:From>
<eb:PartyId>HELSFIHH</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:From>
<eb:To>
<eb:PartyId>003702048999</eb:PartyId>
<eb:Role>Receiver</eb:Role>
</eb:To>
<eb:To>
<eb:PartyId>003714377999</eb:PartyId>
<eb:Role>Intermediator</eb:Role>
</eb:To>
<MessageData>
<eb:MessageId> YV1199015</eb:MessageId>
<eb:Timestamp>2011-02-10T07:00:00+02</eb:Timestamp>
</MessageData>
<Reason>
<Code>12</Code>
<Text>Laskusanoma hylätty, koska liitesanomaa ei löydy tai se on hylätty</Text>
<Text>a</Text>
</Reason>
</Acknowledgement>
<RefToCounterpartMessage>YV1199015::attachments</RefToCounterpartMessage>
<MessageTransmissionDetails>
<MessageSenderDetails>
<FromIdentifier>003702048999</FromIdentifier>
<FromIntermediator>003714377999</FromIntermediator>
</MessageSenderDetails>
<MessageReceiverDetails>
<ToIdentifier>FI4043091020117999</ToIdentifier>
<ToIntermediator>HELSFIHH</ToIntermediator>
</MessageReceiverDetails>
<MessageDetails>
<MessageIdentifier>1297326762_3</MessageIdentifier>
<MessageTimeStamp>2011-02-10T10:32:41+02</MessageTimeStamp>
<RefToMessageIdentifier> YV1199015</RefToMessageIdentifier>
</MessageDetails>
</MessageTransmissionDetails>
<Error>
<Code>16</Code>
<Text>Liitesanoman tunnus on jo käytetty</Text>
<Severity>ERROR</Severity>
</Error>
</Finvoiceack>
```

21.2 Reason Codes and Descriptions:

XS= Attachment message
SI= SenderInfo
RI= ReceiverInfo
RP= ReceiverProposal

Code	Text	
1	Message received for further processing.	service provider specific
2	Receiver not found. The frame's Receiver has incorrect data. Address of the Sender's notification is not SENDERINFO.	INV01-09,RI, SI, RP
3	Service agreement missing. Sender does not have a Finvoice forwarding service agreement with the service provider.	INV01-09,RI, SI, RP
4	Intermediator not found. The frame's Sender or Receiver has incorrect data.	INV01-09,RI, SI, RP
5	Message ID and timestamp already used.	INV01-09,RI, SI, RP
6	Other error: description of error (e.g. e-invoice address in message does not match e-invoice address in the frame)	INV01-09,RI, SI, RP
7	Schema validation errors.	INV01-09,RI, SI, RP
Error codes related to notification service only:		
800	Other error related to notification service: <description of error>.	
801	Invoicer Notification not found.	SI, RP
802	Invoicer does not offer direct payment service.	RP
803	Invoicer Notification already exists.	SI
804	Invoicer Notification cannot be allocated (used with CHANGE and DELETE messages)	SI
805	Receiver is a company.	RP
806	Receiver has refused.	RP
807	Reception proposal cannot be allocated.	RP
During direct debit migration:		
901	SellerDDIdentifier missing from Invoicer Notification.	RP
902	SellerDDIdentifier missing from RP.	RP
Error codes related to invoices with attachments and attachment messages		
10	Maximum number of attachments exceeded.	XS/AS pair
11	Maximum size of attachments exceeded.	XS/AS pair
12	Invoice message rejected, because attachment message could not be found or was rejected.	XS/AS pair
13	Attachment message rejected, because invoice message could not be found or was rejected.	XS/AS pair
14	Sender and receiver details of invoice and attachment message do not match.	XS/AS pair
15	Invoice message ID already used.	XS/AS pair
16	Attachment message ID already used.	XS/AS pair
17	Attachment checksum already used.	XS/AS pair
20	Attachment checksum is incorrect.	XS/AS pair

21	Attachment filename is incorrect.	XS/AS pair
22	Type of attachment is not supported.	XS/AS pair
23	Attachment format is incorrect.	XS/AS pair
24	Attachment size is too large.	XS/AS pair
25	Attachment contains malware.	XS/AS pair
26	Attachment message does not contain reference to invoice or reference is incorrect.	XS/AS pair
39	Other error in processing attachment message.	XS/AS pair

21.2.1 Processing rules for error codes 10–39

A single acknowledgement message is formed for an invoice message and its attachment message.

Rejection of either of these messages always automatically causes the rejection of its counterpart.

Invoice message details are the primary source data for the acknowledgement message.

When an invoice message is found, the invoice message ID is given in the RefToMessageId field of the SOAP frame. Invoice message details are also used in the Acknowledgement element of the Finvoiceack message. An error code that relates to the invoice message is always given in the Reason element.

The attachment message ID included in the invoice message is given in the RefToCounterpartMessage element of the acknowledgement message. An error code that relates to the attachment message is given in the Error element.

As an exception, if an invoice message cannot be found, the attachment message details are used in the acknowledgement message instead.

In this case the RefToMessageId field of the SOAP frame will contain the attachment message ID, and the details of the Acknowledgement element are also picked from the attachment message. The error code is given in the Reason element and can be repeated in the Error element. The invoice message ID included in the attachment message is then given in the RefToCounterpartMessage element.

If the rejection of the invoice message is caused by the rejection or absence of the attachment message, error code 12 is given in the Reason element.

If the rejection of the invoice message is caused by an error in the invoice message, the invoice message error code is given in the Reason element, and attachment message error code 13 is given in the Error element.

Code	Description
10	Maximum number of attachments in attachment message is 10.
11	Maximum total size of attachments in attachment message is 1MB.
12	If the attachment message cannot be found or has been rejected, invoice message rejection error code is always given in Reason element. Error code related to a rejected attachment message is given in Error element. If an attachment message cannot be found, Error element is not used.

13	If the invoice message cannot be found, attachment message rejection error code is given in Reason element. The code can be repeated in the Error element.
14	The invoice message's From/PartyId and To/PartyId details must match the attachment message's FromIdentifier/Intermediator and ToIdentifier/Intermediator details. Error code is given in Reason element.
15	Invoice message's identifier (MessageId) must be unique, and can not be used for more than one invoice message.
16	Attachment message's identifier (MessageId) must be unique, and can not be used for more than one attachment message.
17	Each attachment has a unique checksum calculated from the contents of the attachment. The same attachment may not be sent to several recipients, and the checksum therefore cannot be reused. Error code is given in Error element.
20	Service provider calculates the checksum from the contents of the attachment and compares it with the checksum given in the attachment message. If the checksums do not match, the entire attachment message is rejected. Error code is given in Error element. Location field is used for the attachment ID.
21	The file extension of the attachment's filename must match the type given in the details.
22	Permitted attachment file types are pdf/a, jpeg and png. If the type given in the message is not a permitted type, the attachment message is rejected.
23	If the attachment's file type is not a permitted type, the attachment message is rejected.
24	The permitted maximum size of one attachment is 1MB.
25	Each attachment is checked for malware. If the antivirus software discovers malware, the attachment message is rejected.
26	If the attachment message is lacking a reference to an invoice message, or the reference is incorrect, the attachment message is rejected.
39	Code 39 is used as error code if any of the other codes are not suited for the purpose.

21.2.2 Error scenario examples

Example 1. No errors in the invoice message, attachment message rejected due to duplicate error in attachment message ID. Rejection of attachment message also causes rejection of invoice message.

- SOAP frame
  - Sender and receiver details are given in reverse order in From/To fields of the invoice message
  - Invoice message ID is given in RefToMessageId field
  - Invoice message timestamp is given in Timestamp field
- Finvoiceack/Acknowledgement
  - Details of the invoice message are given in the corresponding fields of the original message
  - Value "12" in the Code field in Reason element, Text field description "Invoice message rejected because attachment message could not be found or was rejected"
- RefToCounterpartMessage
  - Attachment message ID is given in this field
- MessageTransmissionDetails
  - Same information given in this element as in the SOAP frame
- Error

- Code field value “16” and Text field description “Attachment message ID already used”

Example 2. No error in invoice message, attachment message rejected due to virus or malware found in one of the attachments.

- Otherwise same as above, but Error/Code field value “25” and Text field description “Attachment contains malware”
- Identifier of the attachment in which the error was found is inserted in the Location field.

Example 3. Invoice message cannot be found, but attachment message is found and contains no errors.

- SOAP frame
  - Sender and receiver details are given in reverse order in From/To fields of the attachment message
  - Attachment message ID is given in RefToMessageId field
  - Attachment message timestamp is given in Timestamp field
- Finvoiceack/Acknowledgement
  - Details of the attachment message are given in the corresponding fields of the original message
  - Value “13” in the Code field in Reason element, Text field description “Attachment message rejected because invoice message could not be found or was rejected”
- RefToCounterpartMessage
  - Invoice ID from attachment message is given in this field
- MessageTransmissionDetails
  - Same information given in this element as in the SOAP frame
- Error
  - Error details from Reason element can be repeated in Error element.

Appearance of Acknowledgement Message in Browser (XSL)

In order to open an acknowledgement message using an XSL file, the namespace references in the acknowledgement message must be used. The address information of the original message Sender and Receiver has been added to the layout.

22. Finvoice technical description

The minimum and maximum lengths of elements are defined in a separate data list.

Optional and mandatory fields are specified as follows:

Occurs	Definition
1	Mandatory, occurs once.
0..1	Not mandatory, but may occur only once.
1..n	Mandatory at least once. May occur several times.
0..n	Not mandatory, but may occur several times.

XML messages consist of the following types of entities: elements, aggregates and structures. An element is a simple entity including only one string of data. An aggregate is a structural entity consisting of elements. A structure is a more complicated entity that includes either aggregates or both aggregates and elements.

22.1 Attributes Used in the Implementation Guideline

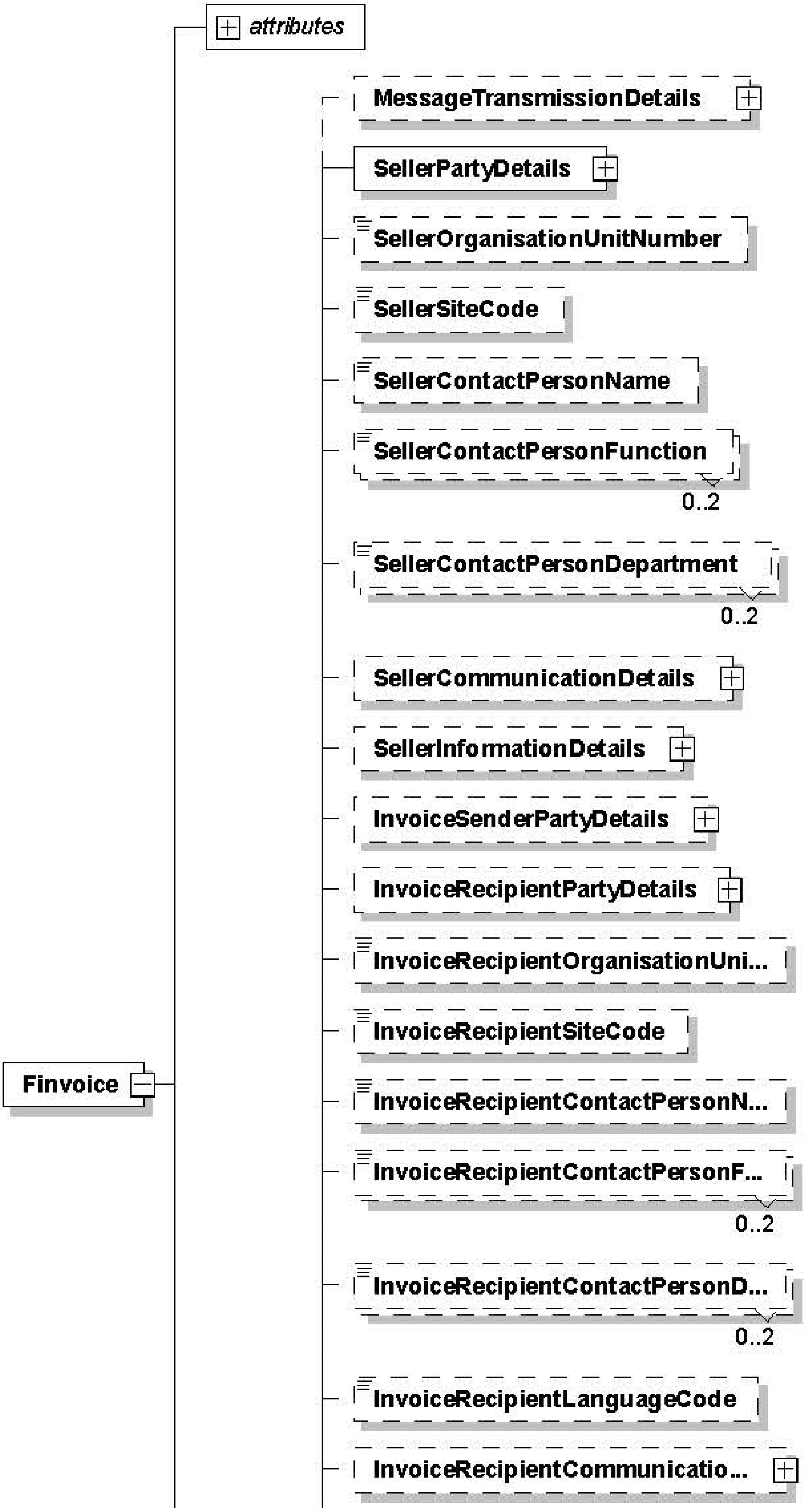
All monetary amount elements (Amount) are associated with the AmountCurrencyIdentifier attribute, even though the monetary amounts associated with the invoice must be in the same currency. The amount of tax is an exception and must be in the currency of the country of sale. The monetary amounts have a decimal part separated by a comma (,). The number of digits following the comma must not exceed the maximum allowed for the specified currency.
A monetary amount may also be negative, in which case it is preceded by a minus sign (-).

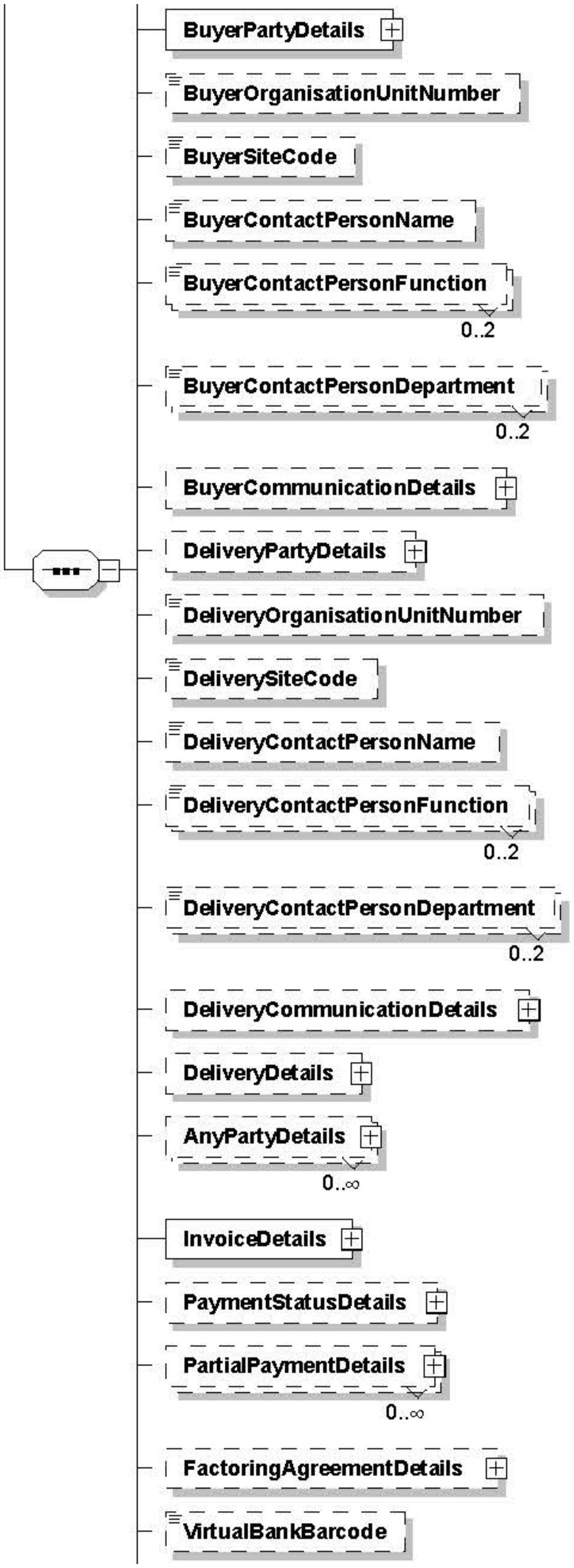
Quantity elements have a UnitCode attribute specifying the unit of the quantity.

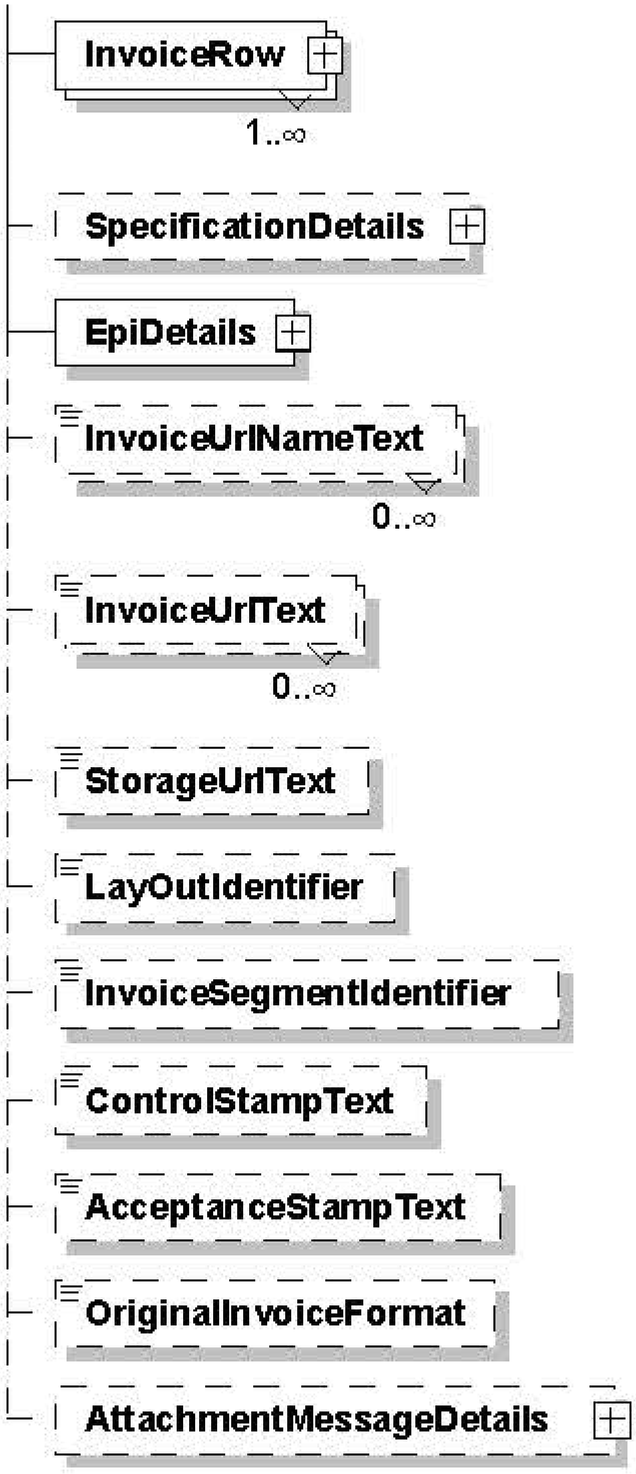
Date elements (such as InvoiceDate) always have a Format attribute of CCYYMMDD.

The EpiCharge element has a ChargeOption attribute.

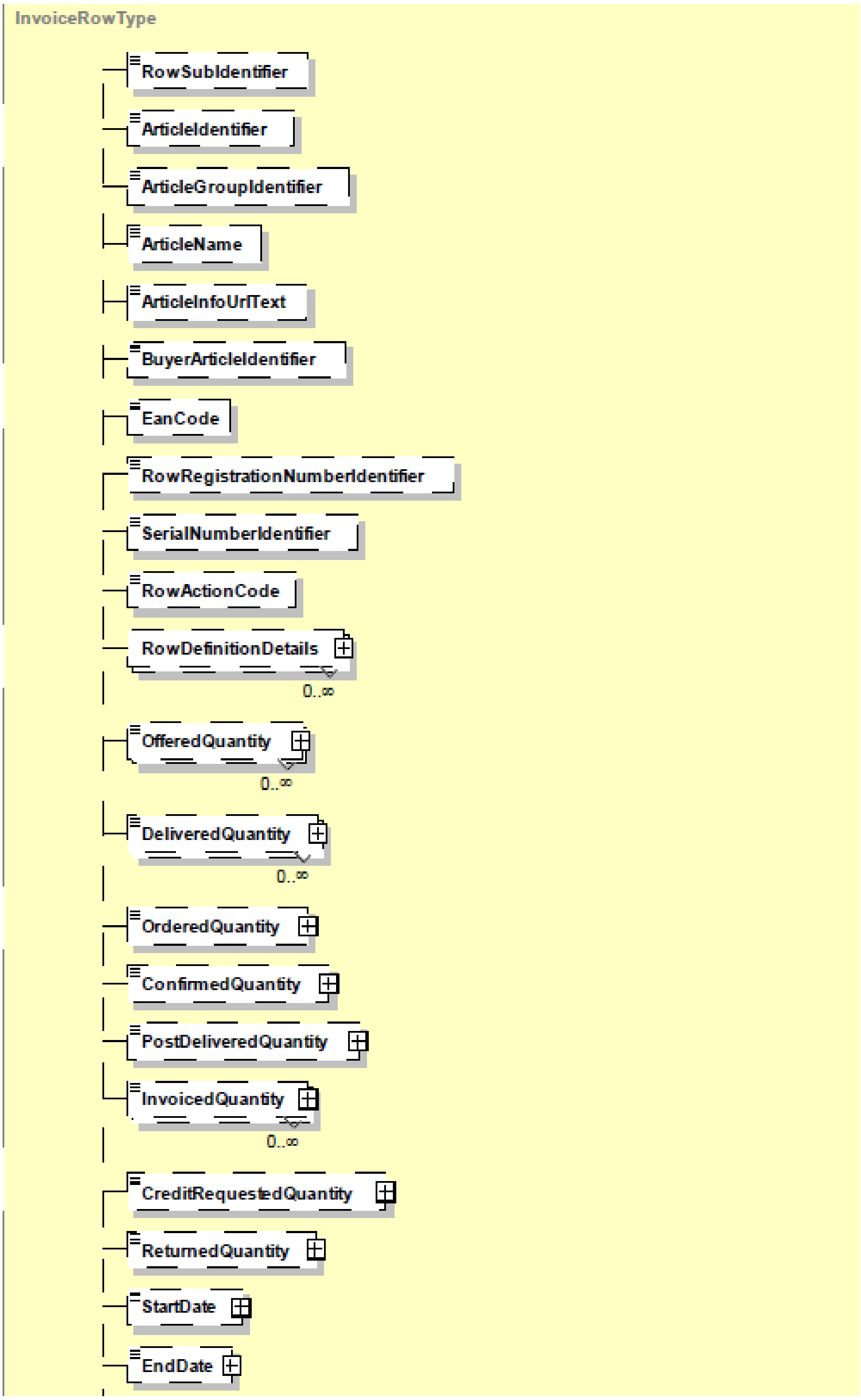
23. Finvoice Structure

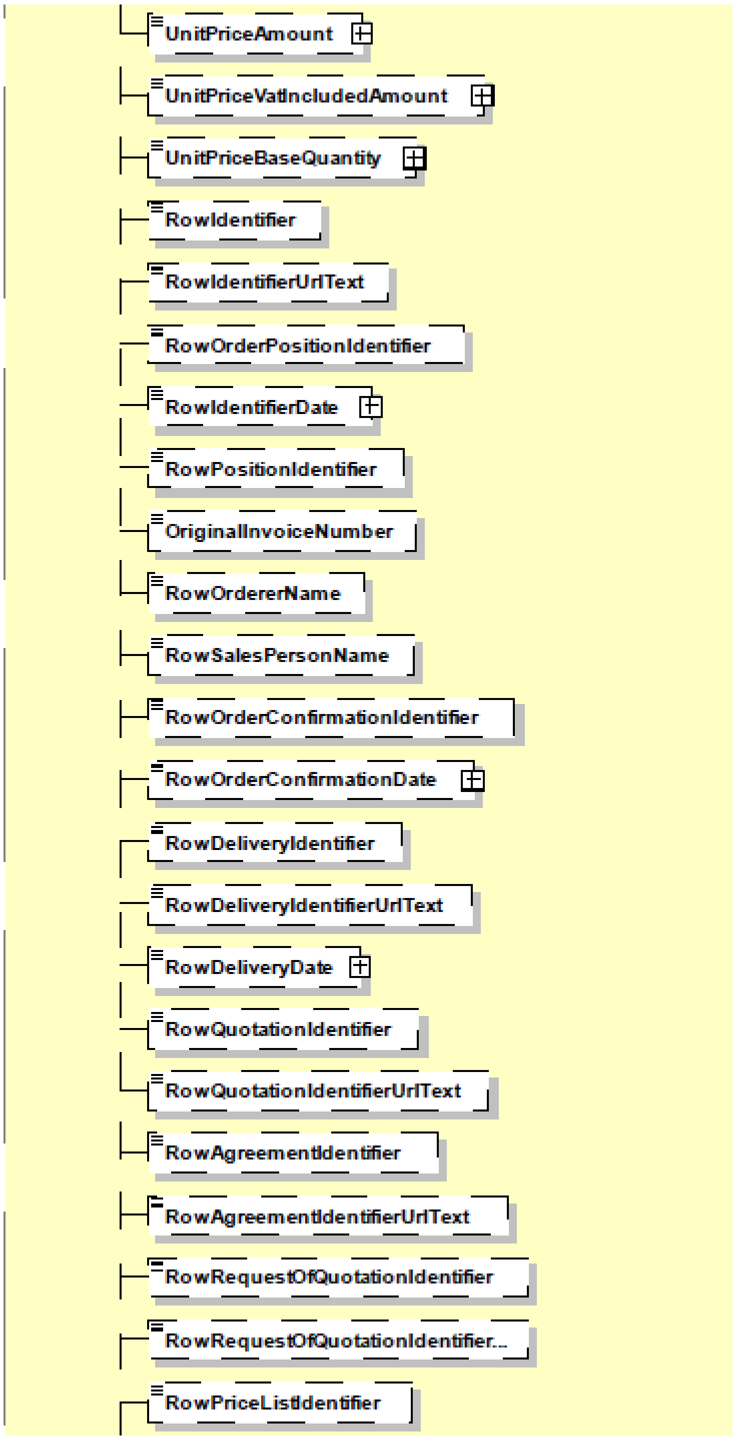

attributes
MessageTransmissionDetails
SellerPartyDetails
SellerOrganisationUnitNumber
SellerSiteCode
SellerContactPersonName
SellerContactPersonFunction
0..2
SellerContactPersonDepartment
0..2
SellerCommunicationDetails
SellerInformationDetails
InvoiceSenderPartyDetails
InvoiceRecipientPartyDetails
InvoiceRecipientOrganisationUni...
InvoiceRecipientSiteCode
InvoiceRecipientContactPersonN...
InvoiceRecipientContactPersonF...
0..2
InvoiceRecipientContactPersonD...
0..2
InvoiceRecipientLanguageCode
InvoiceRecipientCommunicatio...
Finvoice

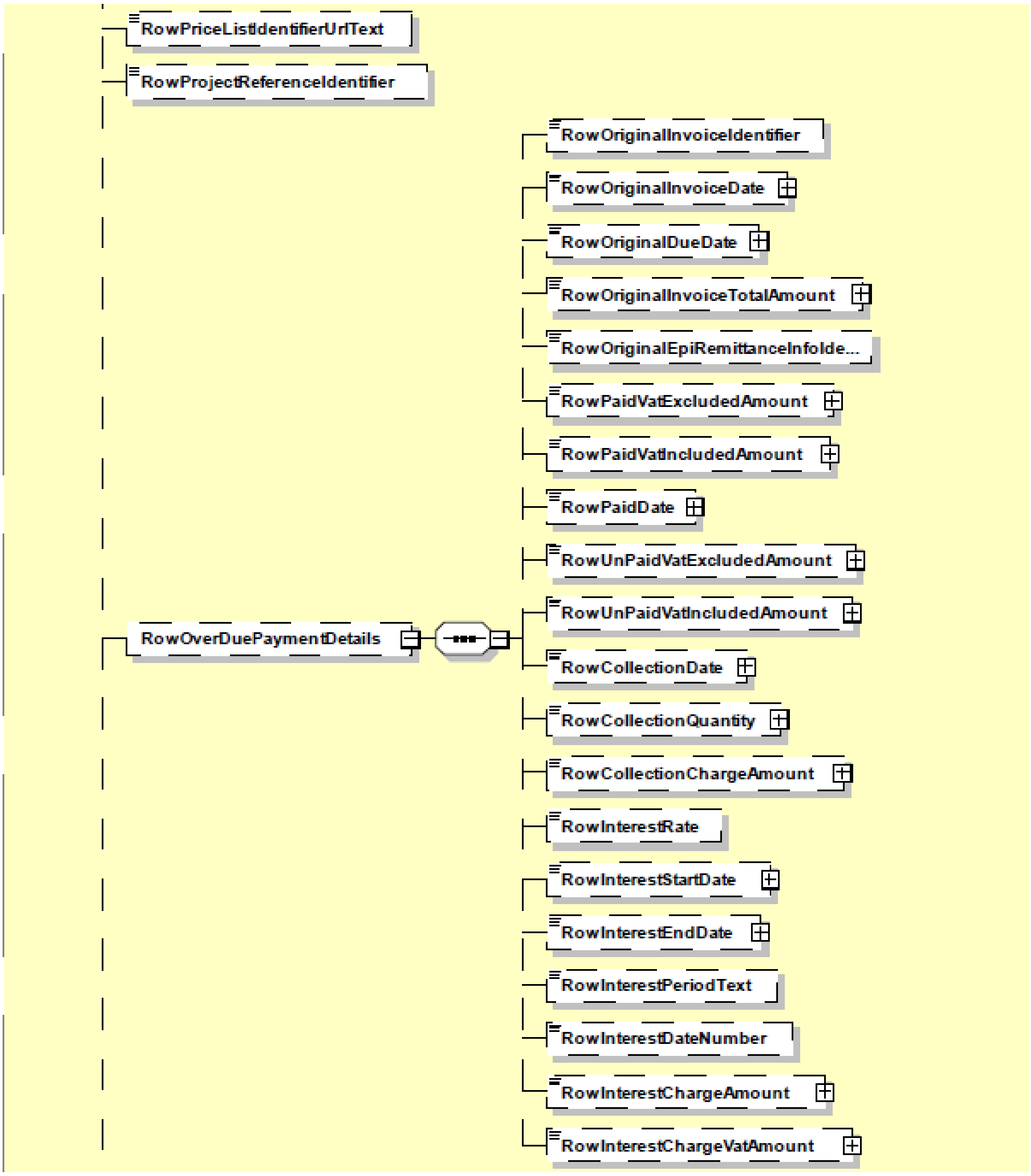

BuyerPartyDetails
BuyerOrganisationUnitNumber
BuyerSiteCode
BuyerContactPersonName
BuyerContactPersonFunction
0..2
BuyerContactPersonDepartment
0..2
BuyerCommunicationDetails
DeliveryPartyDetails
DeliveryOrganisationUnitNumber
DeliverySiteCode
DeliveryContactPersonName
DeliveryContactPersonFunction
0..2
DeliveryContactPersonDepartment
0..2
DeliveryCommunicationDetails
DeliveryDetails
AnyPartyDetails
0..∞
InvoiceDetails
PaymentStatusDetails
PartialPaymentDetails
0..∞
FactoringAgreementDetails
VirtualBankBarcode

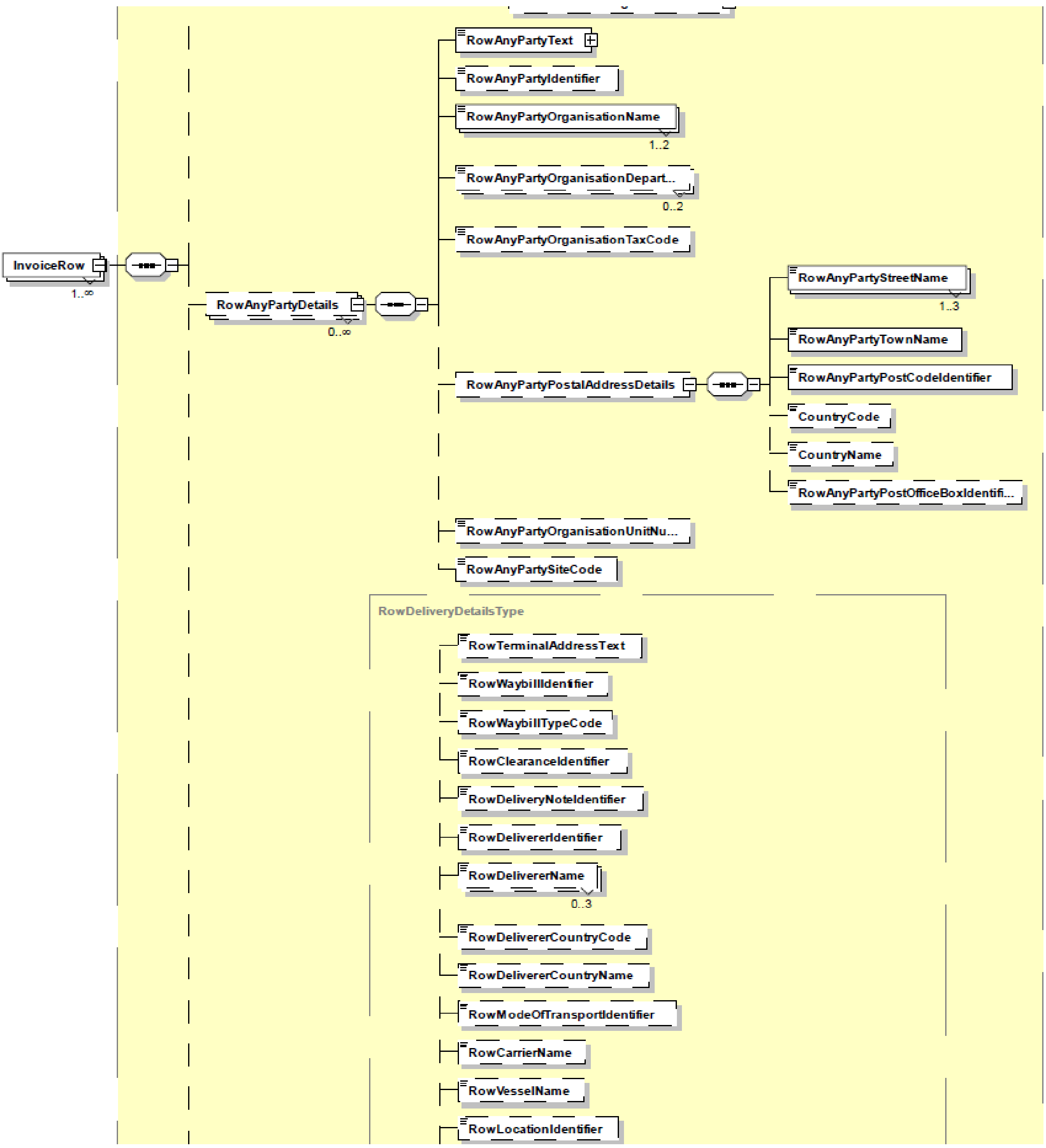

InvoiceRow
1..∞
SpecificationDetails
EpiDetails
InvoiceUrlNameText
0..∞
InvoiceUrlText
0..∞
StorageUrlText
LayOutIdentifier
InvoiceSegmentIdentifier
ControlStampText
AcceptanceStampText
OriginalInvoiceFormat
AttachmentMessageDetails

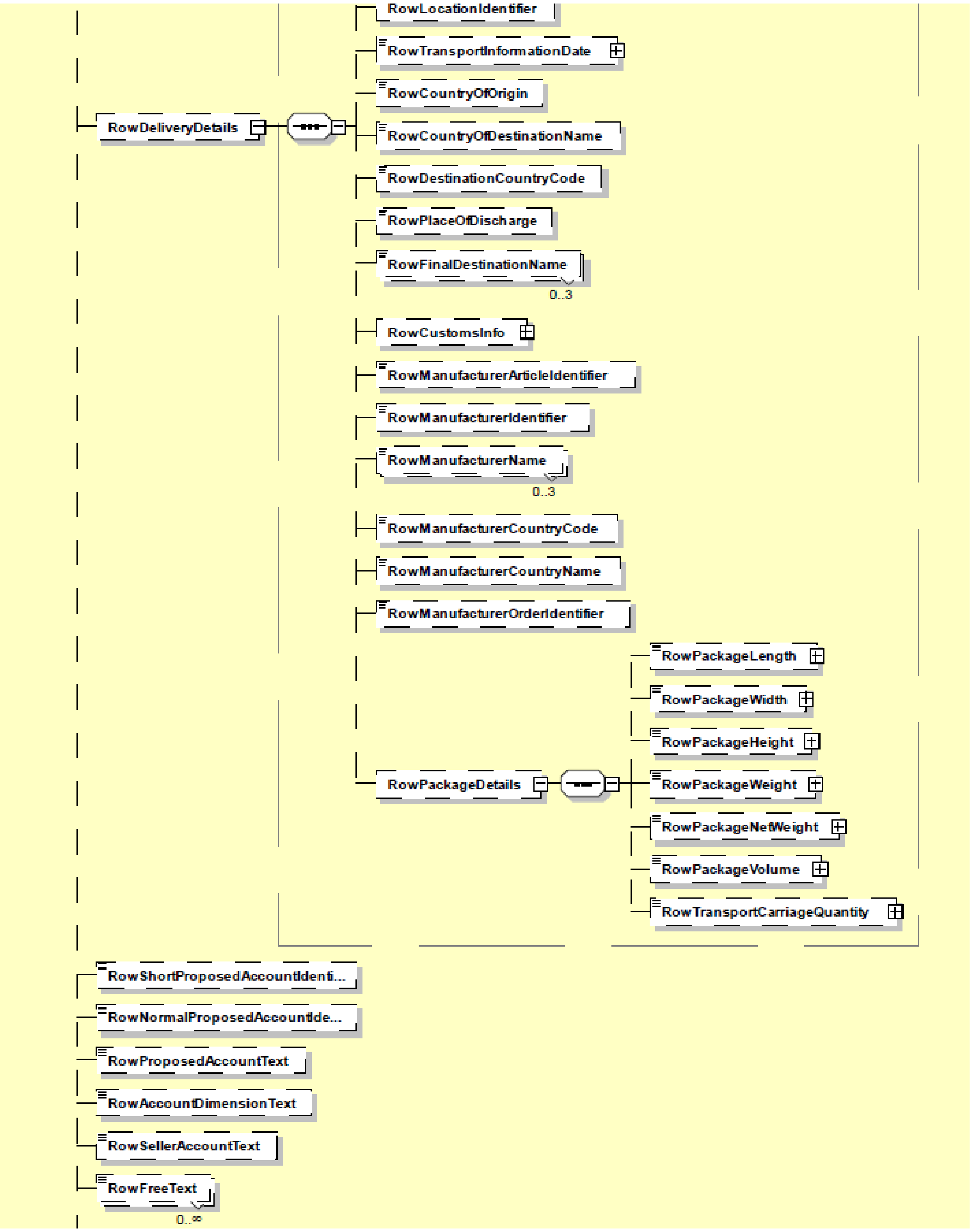
23.1 InvoiceRow Structure

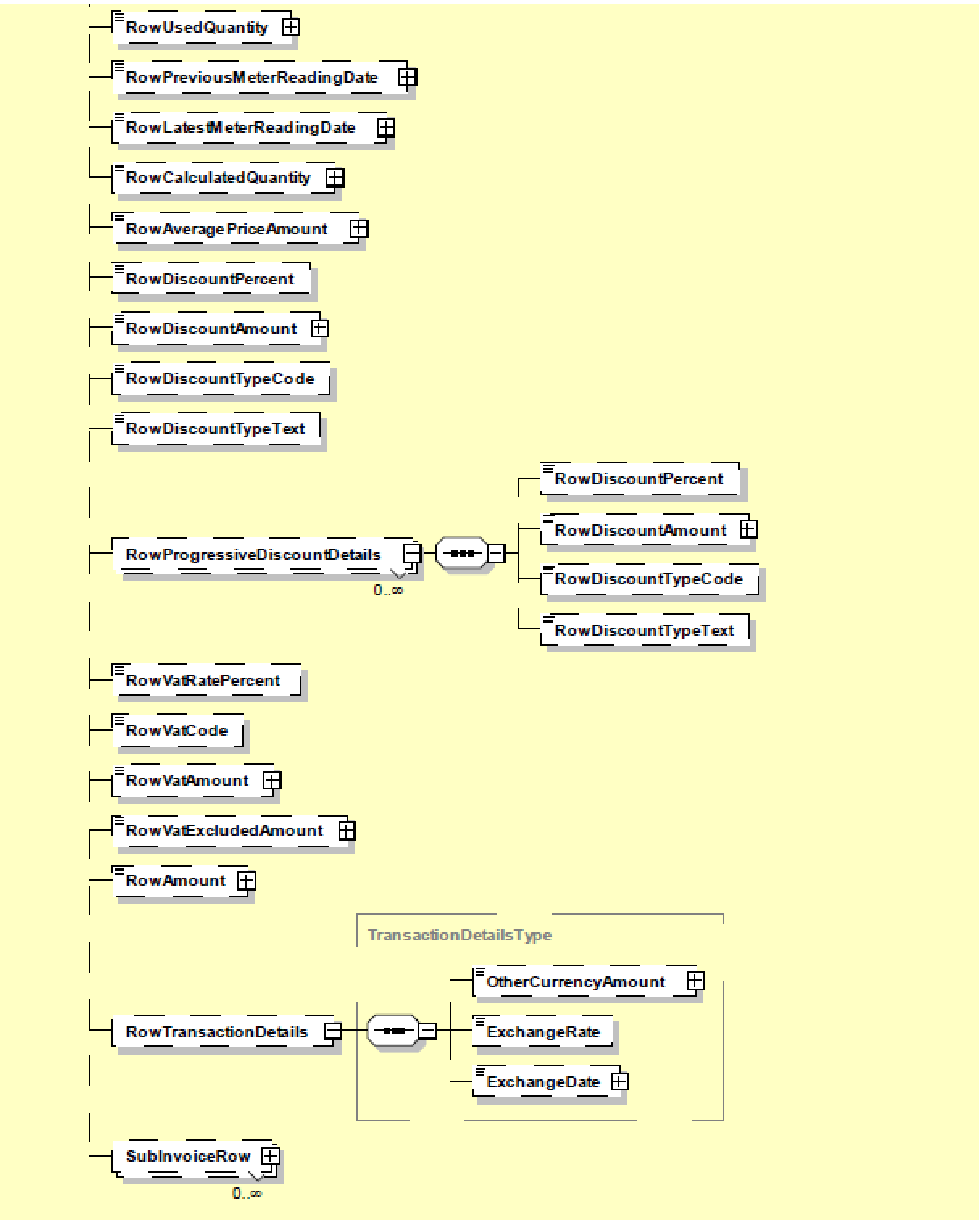

InvoiceRowType
RowSubIdentifier
ArticleIdentifier
ArticleGroupIdentifier
ArticleName
ArticleInfoUrlText
BuyerArticleIdentifier
EanCode
RowRegistrationNumberIdentifier
SerialNumberIdentifier
RowActionCode
RowDefinitionDetails
0..∞
OfferedQuantity
0..∞
DeliveredQuantity
0..∞
OrderedQuantity
ConfirmedQuantity
PostDeliveredQuantity
InvoicedQuantity
0..∞
CreditRequestedQuantity
ReturnedQuantity
StartDate
EndDate

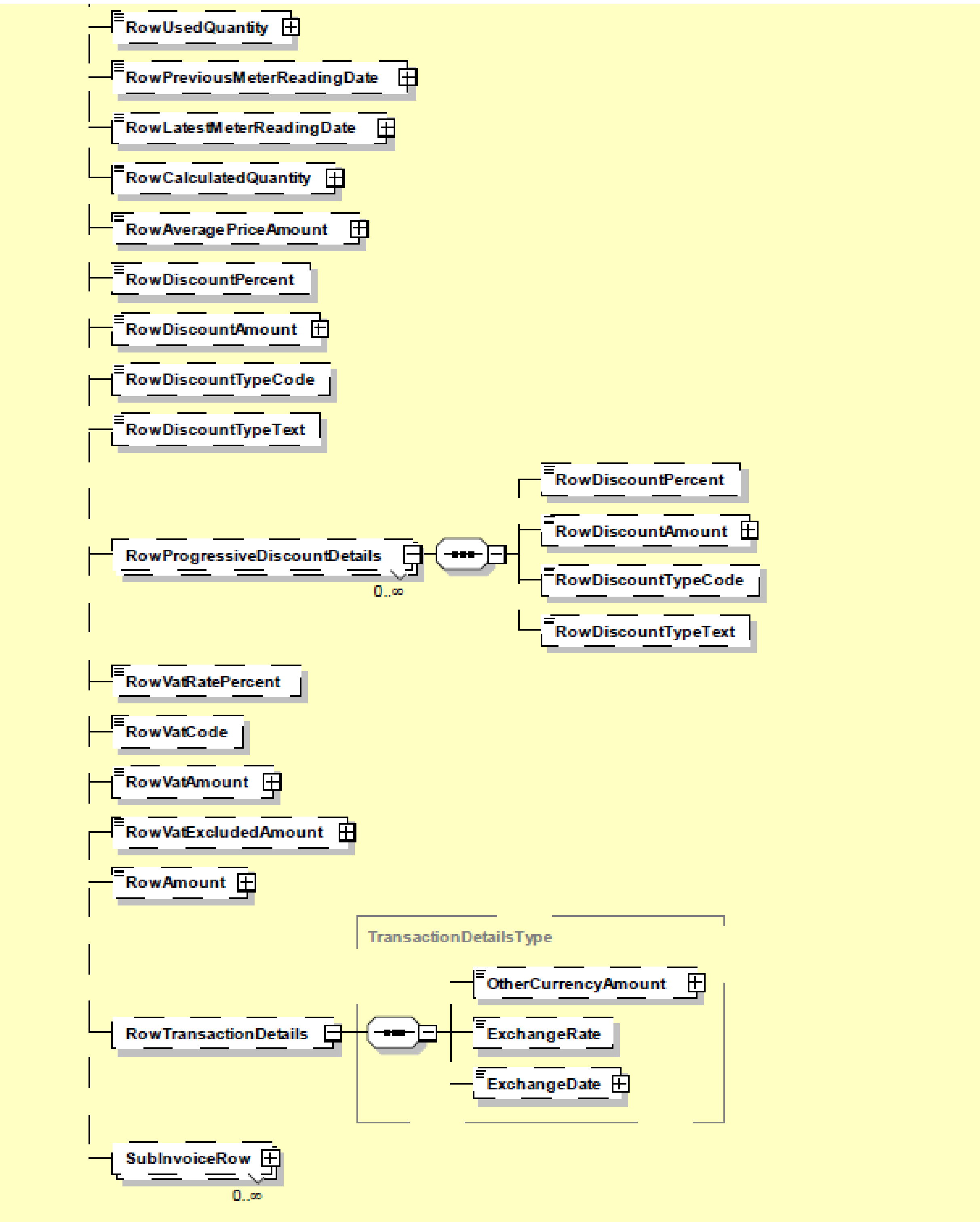

UnitPriceAmount
UnitPriceVatIncludedAmount
UnitPriceBaseQuantity
RowIdentifier
RowIdentifierUrlText
RowOrderPositionIdentifier
RowIdentifierDate
RowPositionIdentifier
OriginalInvoiceNumber
RowOrdererName
RowSalesPersonName
RowOrderConfirmationIdentifier
RowOrderConfirmationDate
RowDeliveryIdentifier
RowDeliveryIdentifierUrlText
RowDeliveryDate
RowQuotationIdentifier
RowQuotationIdentifierUrlText
RowAgreementIdentifier
RowAgreementIdentifierUrlText
RowRequestOfQuotationIdentifier
RowRequestOfQuotationIdentifier...
RowPriceListIdentifier


RowPriceListIdentifierUrlText
RowProjectReferenceIdentifier
RowOverDuePaymentDetails
RowOriginalInvoiceIdentifier
RowOriginalInvoiceDate
RowOriginalDueDate
RowOriginalInvoiceTotalAmount
RowOriginalEpiRemittanceInfoIde...
RowPaidVatExcludedAmount
RowPaidVatIncludedAmount
RowPaidDate
RowUnPaidVatExcludedAmount
RowUnPaidVatIncludedAmount
RowCollectionDate
RowCollectionQuantity
RowCollectionChargeAmount
RowInterestRate
RowInterestStartDate
RowInterestEndDate
RowInterestPeriodText
RowInterestDateNumber
RowInterestChargeAmount
RowInterestChargeVatAmount

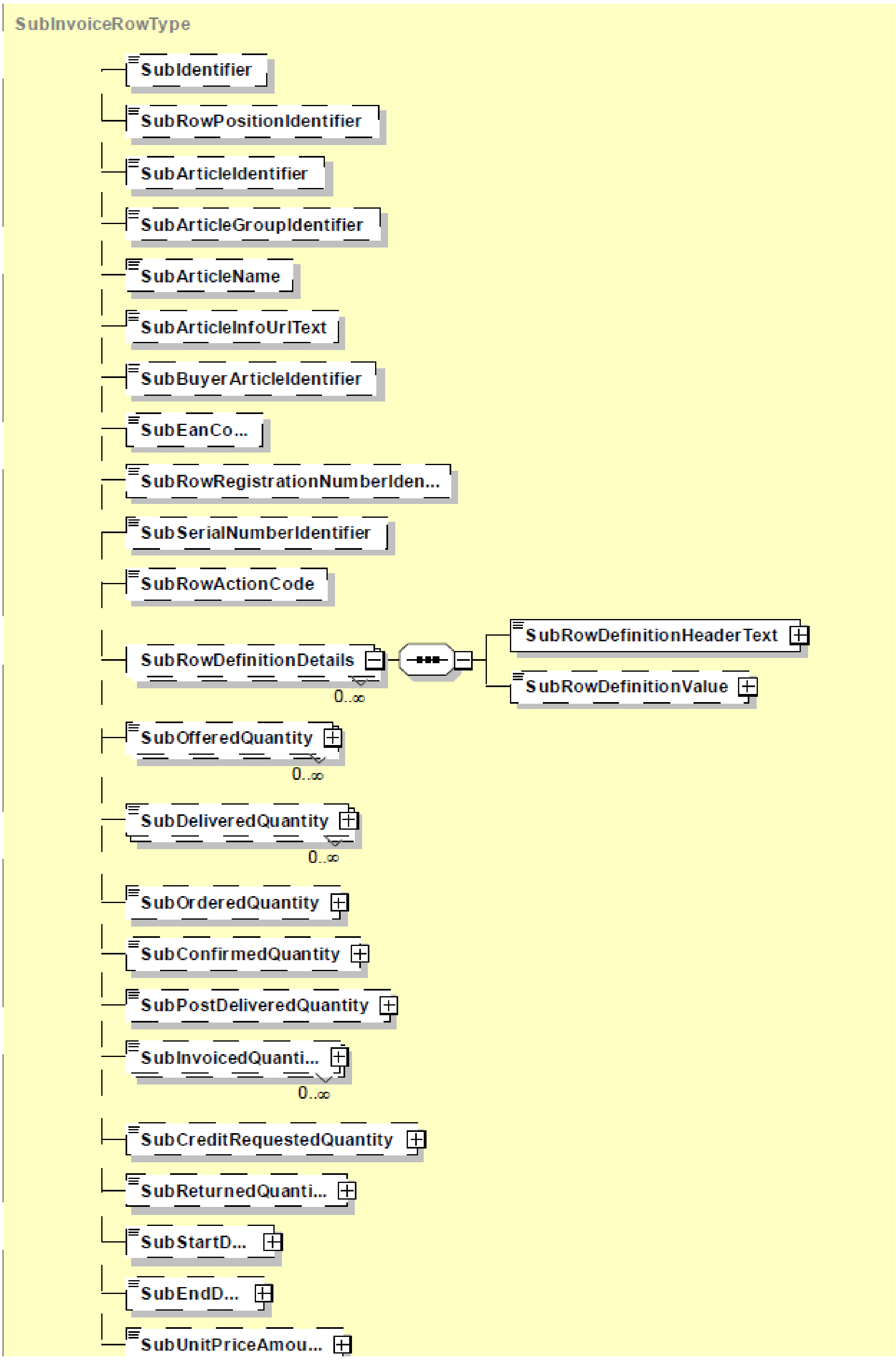

RowAnyPartyText
RowAnyPartyIdentifier
RowAnyPartyOrganisationName
1..2
RowAnyPartyOrganisationDepart...
0..2
RowAnyPartyOrganisationTaxCode
InvoiceRow
1..∞
RowAnyPartyStreetName
1..3
RowAnyPartyDetails
0..∞
RowAnyPartyTownName
RowAnyPartyPostalAddressDetails
RowAnyPartyPostCodeIdentifier
CountryCode
CountryName
RowAnyPartyPostOfficeBoxIdentifi...
RowAnyPartyOrganisationUnitNu...
RowAnyPartySiteCode
RowDeliveryDetailsType
RowTerminalAddressText
RowWaybillIdentifier
RowWaybillTypeCode
RowClearanceIdentifier
RowDeliveryNoteIdentifier
RowDelivererIdentifier
RowDelivererName
0..3
RowDelivererCountryCode
RowDelivererCountryName
RowModeOfTransportIdentifier
RowCarrierName
RowVesselName
RowLocationIdentifier

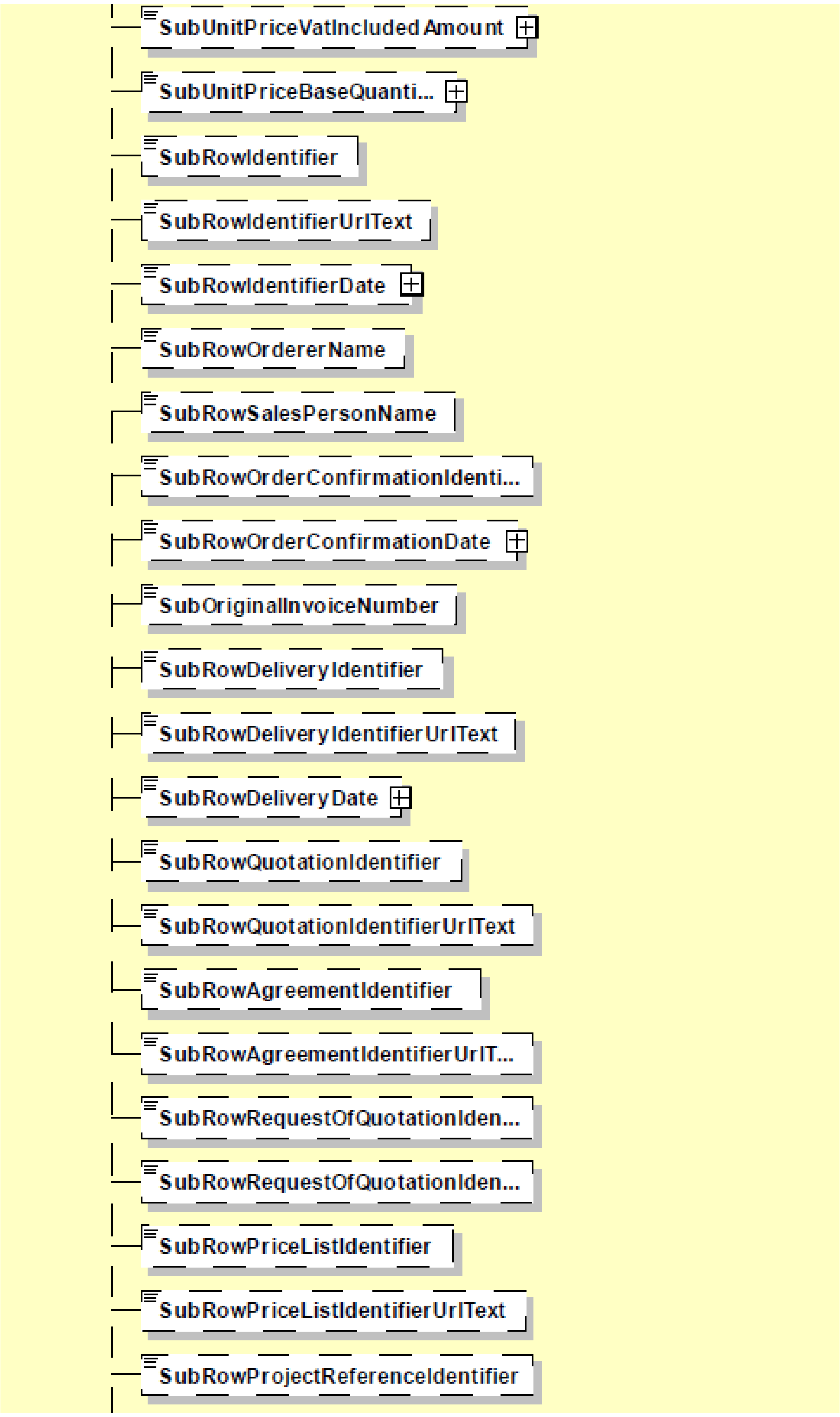

RowLocationIdentifier
RowTransportInformationDate
RowCountryOfOrigin
RowDeliveryDetails
RowCountryOfDestinationName
RowDestinationCountryCode
RowPlaceOfDischarge
RowFinalDestinationName
0..3
RowCustomsInfo
RowManufacturerArticleIdentifier
RowManufacturerIdentifier
RowManufacturerName
0..3
RowManufacturerCountryCode
RowManufacturerCountryName
RowManufacturerOrderIdentifier
RowPackageLength
RowPackageWidth
RowPackageHeight
RowPackageDetails
RowPackageWeight
RowPackageNetWeight
RowPackageVolume
RowTransportCarriageQuantity
RowShortProposedAccountIdenti...
RowNormalProposedAccountIde...
RowProposedAccountText
RowAccountDimensionText
RowSellerAccountText
RowFreeText
0..∞

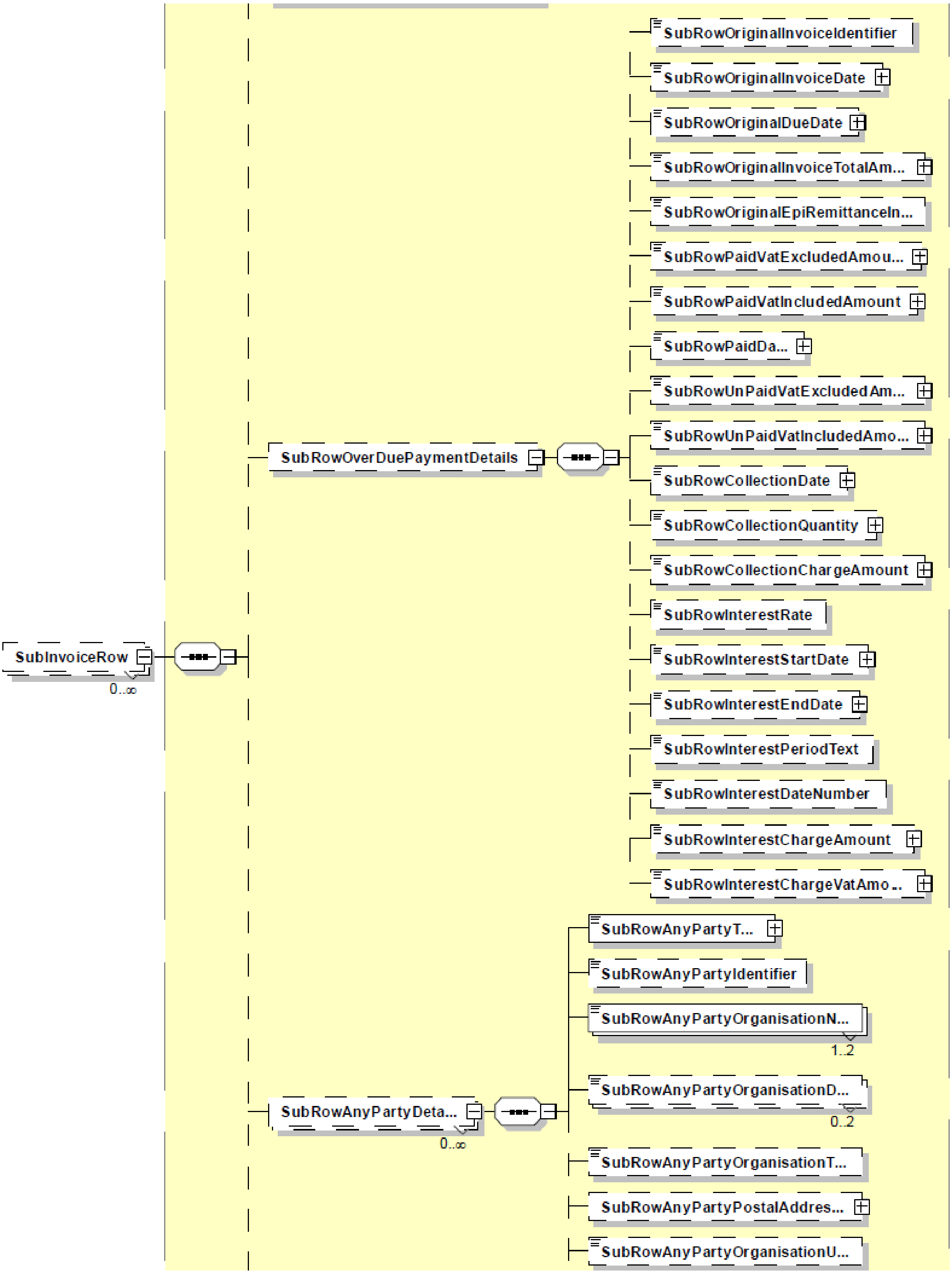

RowUsedQuantity
RowPreviousMeterReadingDate
RowLatestMeterReadingDate
RowCalculatedQuantity
RowAveragePriceAmount
RowDiscountPercent
RowDiscountAmount
RowDiscountTypeCode
RowDiscountTypeText
RowProgressiveDiscountDetails
0..∞
RowDiscountPercent
RowDiscountAmount
RowDiscountTypeCode
RowDiscountTypeText
RowVatRatePercent
RowVatCode
RowVatAmount
RowVatExcludedAmount
RowAmount
TransactionDetailsType
RowTransactionDetails
OtherCurrencyAmount
ExchangeRate
ExchangeDate
SubInvoiceRow
0..∞

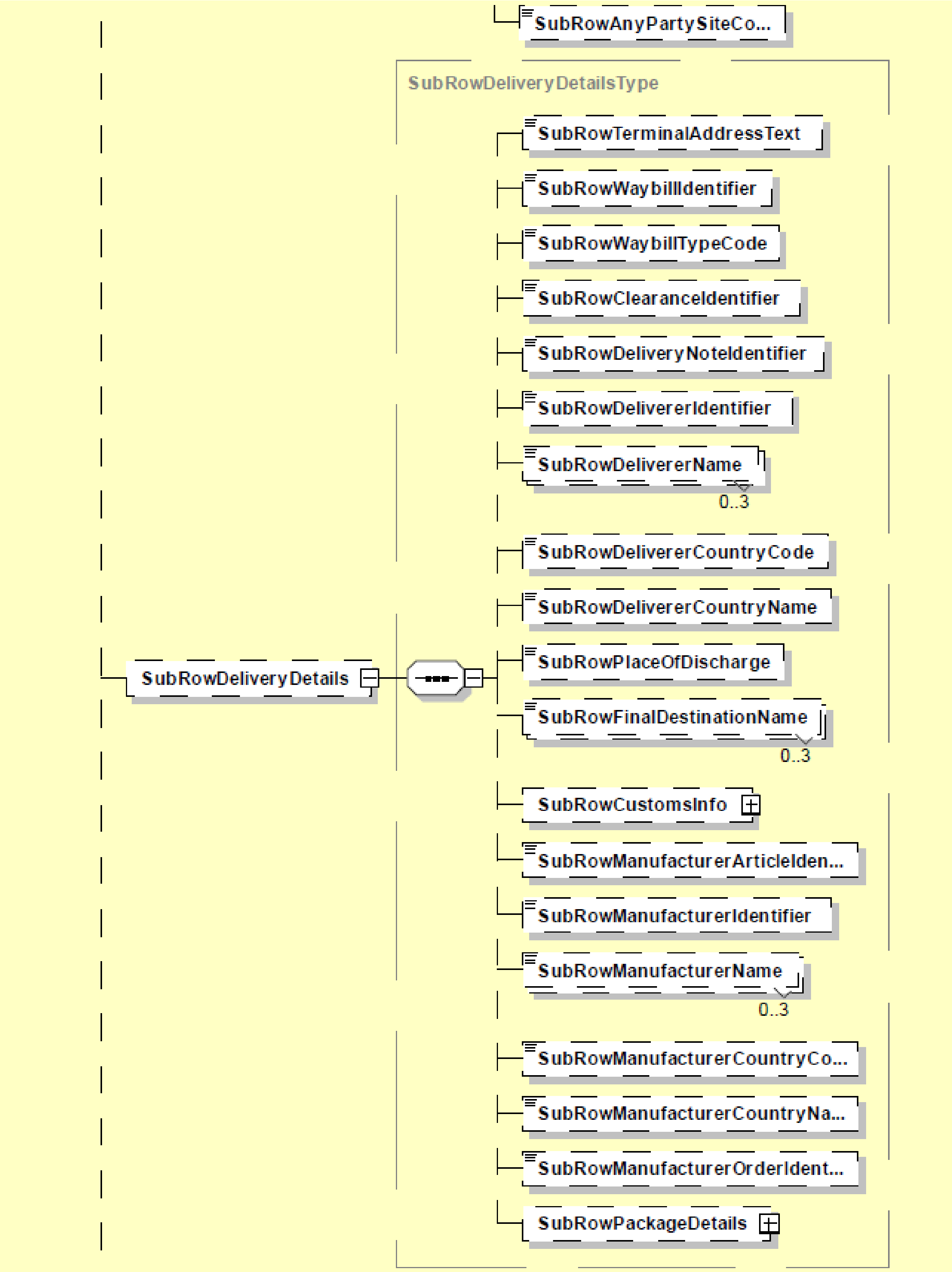

RowUsedQuantity
RowPreviousMeterReadingDate
RowLatestMeterReadingDate
RowCalculatedQuantity
RowAveragePriceAmount
RowDiscountPercent
RowDiscountAmount
RowDiscountTypeCode
RowDiscountTypeText
RowProgressiveDiscountDetails
0..∞
RowDiscountPercent
RowDiscountAmount
RowDiscountTypeCode
RowDiscountTypeText
RowVatRatePercent
RowVatCode
RowVatAmount
RowVatExcludedAmount
RowAmount
TransactionDetailsType
RowTransactionDetails
OtherCurrencyAmount
ExchangeRate
ExchangeDate
SubInvoiceRow
0..∞

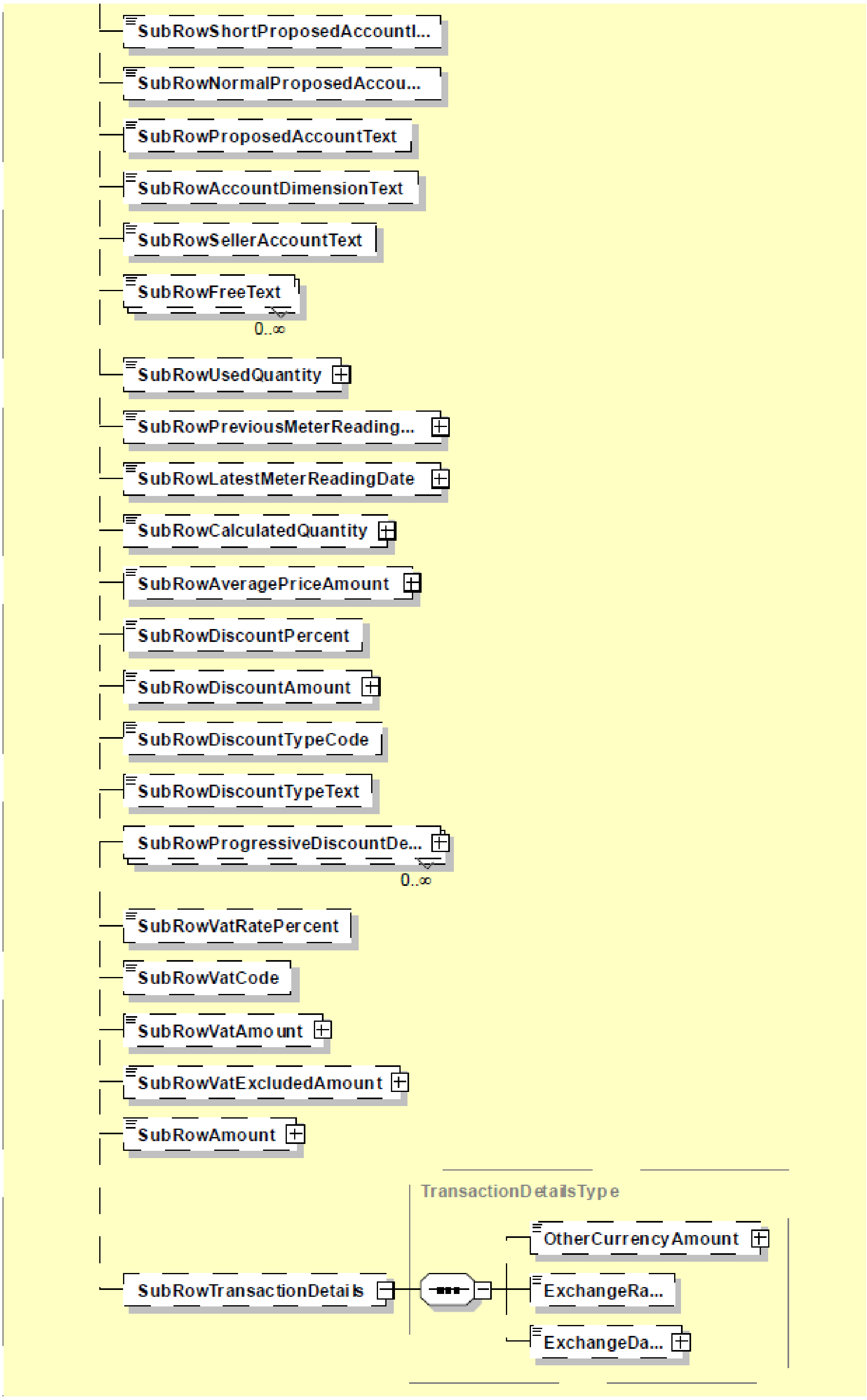
23.2 SubInvoiceRow Structure


SubInvoiceRowType
SubIdentifier
SubRowPositionIdentifier
SubArticleIdentifier
SubArticleGroupIdentifier
SubArticleName
SubArticleInfoUrlText
SubBuyerArticleIdentifier
SubEanCo...
SubRowRegistrationNumberIden...
SubSerialNumberIdentifier
SubRowActionCode
SubRowDefinitionDetails
0..∞
SubRowDefinitionHeaderText
SubRowDefinitionValue
SubOfferedQuantity
0..∞
SubDeliveredQuantity
0..∞
SubOrderedQuantity
SubConfirmedQuantity
SubPostDeliveredQuantity
SubInvoicedQuanti...
0..∞
SubCreditRequestedQuantity
SubReturnedQuanti...
SubStartD...
SubEndD...
SubUnitPriceAmou...


SubUnitPriceVatIncludedAmount
SubUnitPriceBaseQuanti...
SubRowIdentifier
SubRowIdentifierUrlText
SubRowIdentifierDate
SubRowOrdererName
SubRowSalesPersonName
SubRowOrderConfirmationIdenti...
SubRowOrderConfirmationDate
SubOriginalInvoiceNumber
SubRowDeliveryIdentifier
SubRowDeliveryIdentifierUrlText
SubRowDeliveryDate
SubRowQuotationIdentifier
SubRowQuotationIdentifierUrlText
SubRowAgreementIdentifier
SubRowAgreementIdentifierUrlT...
SubRowRequestOfQuotationIden...
SubRowRequestOfQuotationIden...
SubRowPriceListIdentifier
SubRowPriceListIdentifierUrlText
SubRowProjectReferenceIdentifier


SubInvoiceRow
0..∞
SubRowOverDuePaymentDetails
SubRowOriginalInvoiceIdentifier
SubRowOriginalInvoiceDate
SubRowOriginalDueDate
SubRowOriginalInvoiceTotalAm...
SubRowOriginalEpiRemittanceIn...
SubRowPaidVatExcludedAmou...
SubRowPaidVatIncludedAmount
SubRowPaidDa...
SubRowUnPaidVatExcludedAm...
SubRowUnPaidVatIncludedAmo...
SubRowCollectionDate
SubRowCollectionQuantity
SubRowCollectionChargeAmount
SubRowInterestRate
SubRowInterestStartDate
SubRowInterestEndDate
SubRowInterestPeriodText
SubRowInterestDateNumber
SubRowInterestChargeAmount
SubRowInterestChargeVatAmo...
SubRowAnyPartyDeta...
0..∞
SubRowAnyPartyT...
SubRowAnyPartyIdentifier
SubRowAnyPartyOrganisationN...
1..2
SubRowAnyPartyOrganisationD...
0..2
SubRowAnyPartyOrganisationT...
SubRowAnyPartyPostalAddres...
SubRowAnyPartyOrganisationU...


SubRowAnyPartySiteCo...
SubRowDeliveryDetailsType
SubRowTerminalAddressText
SubRowWaybillIdentifier
SubRowWaybillTypeCode
SubRowClearanceIdentifier
SubRowDeliveryNoteIdentifier
SubRowDelivererIdentifier
SubRowDelivererName
0..3
SubRowDelivererCountryCode
SubRowDelivererCountryName
SubRowPlaceOfDischarge
SubRowDelivery Details
SubRowFinalDestinationName
0..3
SubRowCustomsInfo
SubRowManufacturerArticleIden...
SubRowManufacturerIdentifier
SubRowManufacturerName
0..3
SubRowManufacturerCountryCo...
SubRowManufacturerCountryNa...
SubRowManufacturerOrderIdent...
SubRowPackageDetails


SubRowShortProposedAccountI...
SubRowNormalProposedAccou...
SubRowProposedAccountText
SubRowAccountDimensionText
SubRowSellerAccountText
SubRowFreeText
0..∞
SubRowUsedQuantity
SubRowPreviousMeterReading...
SubRowLatestMeterReadingDate
SubRowCalculatedQuantity
SubRowAveragePriceAmount
SubRowDiscountPercent
SubRowDiscountAmount
SubRowDiscountTypeCode
SubRowDiscountTypeText
SubRowProgressiveDiscountDe...
0..∞
SubRowVatRatePercent
SubRowVatCode
SubRowVatAmount
SubRowVatExcludedAmount
SubRowAmount
TransactionDetailsType
SubRowTransactionDetails
OtherCurrencyAmount
ExchangeRa...
ExchangeDa...

24. Descriptions of data in the Data List

A separate excel table describing the data used in Finvoice is available at www.finvoice.info. The new elements added to the Finvoice version 2.0 are marked in red.

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00120 Helsinki
www.fkl.fi

FFI | Federation of Finnish Financial Service