

## Electronic invoicing –Core Invoice Usage Specification Local Government Ireland – Utility companies

Page

### **Foreword**

The European standard EN 16931-1 "Semantic data model of the Core elements of an electronic invoice" enables invoice recipients to limit the data model with a core invoice Usage specification ("CIUS"). Suppliers are then obliged to adhere to that restriction. Invoices that are not may be rejected by the recipient. Because it is undesirable when each customer defines its own containment, it is agreed in the Irish Local Government to use a common restriction for Utility companies. It is expected that these restrictions will also be adopted by other Public Bodies. This document specifies this restriction.

This Usage Specification has been aligned with the Core Invoice Usage specification released by PEPPOL. This specification is applied as an additional restriction on top of the PEPPOL restrictions. It is not registered in PEPPOL and is designed to be part of a trade agreement between the Buyer and Seller involved.

## Introduction

The European Commission estimates that massively passing on electronic invoicing in Europe will save EUR 240 billion over a six-year period. Therefore, the EC has the objective to allow electronic billing in 2020 to be the most commonly used billing method.

In order to achieve this objective, the European Directive 2014/55/EU<sup>1</sup> Adopted by the European Parliament. This directive prescribes all Public Bodies must be able to receive and process electronic invoices. The directive was implemented in Ireland in an amendment to the procurement legislation. This change is effective from 18 April 2019.

According to the directive and the law electronic invoices must comply with the European standard EN 16931-1. This standard contains a semantic data model of a core invoice. A core invoice must also be formatted according to one of two syntaxes: UBL 2.1 or UN/CEFACT XML CII D16B (both are implementations of XML) to be able to receive and process the core invoice automatically.

A core invoice is based on the assumption that a limited number of data elements contain the information requirement for the most Invoices used. The elements of the core invoice are detailed later in this document. With this set of elements, invoices can be compiled that meet the legal and commercial requirements.

Implementation of the core invoice in automated billing systems (sending and receiving) should cause the exchange of electronic invoices to gradually replace paper bills.

The data model in EN 16931-1 meets the following criteria:

- It is technically neutral and does not depend on the products of certain Suppliers
- It is not in contradiction with international e-billing standards;
- It takes into account the directives and legislation to protect privacy, in particular Directive 95/46/EC;
- It meets the requirements that are in VAT Directive 2006/112/EC<sup>2</sup>;
- It makes it possible to create user-friendly, flexible and efficient billing systems;
- It takes account of the needs of small and medium-sized enterprises and of decentralised and semi-Public bodies;
- It is useful for invoicing between companies (B2B) and invoicing to and from Governments (B2G and G2B).

This specification for Irish Local Government is designed to assist implementation of the European standard for the basic invoice in Ireland by both Public Bodies and business. The instruction manual has been prepared by the LGMA Project, funded by CEF consisting of representatives of the Local Government and Business.

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<sup>1</sup> Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic Invoicing in public procurement: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0055>.

<sup>2</sup> COUNCIL DIRECTIVE. 2006/112/EC of 28 November 2006 on the common system of value added tax – Last version: 2006L0112-EN-01.01.2015-016,001: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02006L0112-20150101>.



## 1 Scope

This document specifies the curtailment and use of the European standard EN 16931-1 specifically for Irish Local Government.

The Invoice is considered to have similar functionality as described in the EN.

In Scope invoicing functionality for this CIUS

An invoice may support functions related to a number of related (internal) business processes. The core invoice model shall support the following functions:

- Accounting;
- Invoice verification against the contract, the purchase order and the goods and service delivered;
- VAT reporting;
- Auditing;
- Payment;

Explicit support for the following functions (but not limited to) is out of scope for the core invoice model although information elements in the core invoice model may provide some support for these functions:

- Inventory management;
- Delivery processes;
- Customs clearance;
- Marketing;
- Reporting.

These functions were corroborated by a Functional Report that was also developed during the project and published [here](#).



## 2 Normative references

The following documents are referred to as normative, they are essential for the interpretation and implementation of this document. The latest edition is valid for undated references.

EN 16931-1, *Key elements of an electronic invoice*

PEPPOL CIUS – a restriction on EN 16931

and ISO 3166-1, *Codes for the representation of names of countries and their Subdivisions — Part 1: Country codes (ISO 3166-1)*

ISO 4217, *Codes for the representation of currencies*

ISO 8601, *Data elements and Interchange formats — Information interchange — representation of dates and times*

ISO 15000-5, *Electronic Business Extensible Markup Language (EbXML) — Part 5: Core Components specification (CCS)*

ISO/IEC 6523 (all parts), *Information Technology — Structure for the identification of organizations and organization parts*

UN/ECE Rec. 20 *Codes for units of measure used in international trade.*

<http://tfig.unece.org/contents/recommendation-20.htm>

UN/ECE Rec. 21. *Codes for types of cargo, packages and packaging materials.*

[https://www.unece.org/fileadmin/DAM/cefact/recommendations/rec21/rec21rev1\\_ecetrd195 E.pdf](https://www.unece.org/fileadmin/DAM/cefact/recommendations/rec21/rec21rev1_ecetrd195_E.pdf)

## Informative references –

The Dutch National CIUS (NLCIUS) [https://www.stpe.nl/over\\_nlcious.html](https://www.stpe.nl/over_nlcious.html) was used as a template and source for this document.

## Terms and definitions

The following terms and definitions apply in this document:

### 3.1 Electronic Invoice

An invoice drawn up, sent and received in a structured electronic form that enables automatic and electronic processing

Source Directive 2014/55/EU]

### 3.2 Semantic Data Model

A structured series of mutually logically related terms and their meanings, specifying the core elements of an electronic invoice

### 3.3 Information element

Semantic concept that can be defined, independent of representation in a syntax

### 3.4 Structured Information element

Information element that can be processed automatically

### 3.5 syntax

The machine-readable language or language variant that is used to display the data elements contained in an electronic invoice

### 3.6 Business

#### **Term**

The name and identification that serve as the primary reference of an information element

### 3.7 Model of the core

#### **invoice**

Semantic data model of the core elements of an electronic invoice

### 3.8 Core elements of an electronic invoice

A collection of essential data components which must contain an electronic invoice in order to interoperate cross-border, including the information necessary to ensure compliance with the statutory requirements.

### 3.9 Identification

A row of characters used to establish the identity of an object instance within an Identification schema and distinguish it from all other objects within that schema

Note: An identifier may consist of a word, number, letter, symbol, or any combination thereof, depending on the identification scheme.

### 3.10 Identification schema

Collection of Identifiers of specific objects With Common Identification rules

### 3.11 Compliant

Some or all elements of the model are used and all rules are respected

Note: Based on the Toga<sup>3</sup> Definition of a compliant specification.

### 3.12 conformant

All rules of the model are respected and some additional elements not defined in the model are also used

Note: Based on Togaf<sup>3</sup> Definition of a conformant specification.

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<sup>3</sup> Togaf Architecture Compliance: <http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap48.html>

### 3 Summary

The following is a list of elements required by the Irish Local Government (as gathered in the Functional Report) to send an eInvoice compliant with EN 16931.

In general Purchase Orders are issued and the PO number is expected in return. However, in this scenario, a Purchase Order is not issued. The cases where this is allowed is;

- A Utility Bill
- A Mobile Phone Bill
- A Landline phone Bill
- Subscriptions

Note: the ID column contains the standard identifiers from EN 16931. These can be used to lookup further information in the EN and related parts as published by CEN.

#### EN 16931-1 mandatory requirements

ID	Business Term
BT-1	Invoice number
BT-2	Invoice Date
BT-3	Invoice type code
BT-5	Invoice currency code
BT-22	Invoice note
BG-2	<b>PROCESS CONTROL</b>
BT-24	Specification identifier
BG-4	<b>SELLER</b>
BT-27	Seller name
BG-5	<b>SELLER POSTAL ADDRESS</b>
BT-40	Seller country code
BG-7	<b>BUYER</b>
BT-44	Buyer name
BG-8	<b>BUYER POSTAL ADDRESS</b>
BT-55	Buyer country code
BG-22	<b>DOCUMENT TOTALS</b>
BT-106	Sum of Invoice line net amount
BT-109	Invoice total amount without VAT
BT-112	Invoice total amount with VAT
BT-115	Amount due for payment
BG-23	<b>VAT BREAKDOWN</b>
BT-116	VAT category taxable amount
BT-117	VAT category tax amount
BT-118	VAT category code
BG-25	<b>INVOICE LINE</b>
BT-129	Invoiced quantity
BT-130	Invoiced quantity unit of measure code
BT-131	Invoice line net amount
BG-29	<b>PRICE DETAILS</b>
BT-146	Item net price
BG-30	<b>LINE VAT INFORMATION</b>

<b>BT-151</b>	Invoiced item VAT category code
<b>BG-31</b>	<b>ITEM INFORMATION</b>
<b>BT-153</b>	Item name

**Additional PEPPOL requirements see PEPPOL BIS 3 Billing for more detail.**

<b>ID</b>	<b>Business Term</b>
<b>BT-23</b>	Business process type
<b>BT-29</b>	Seller identifier e.g. VAT number or GLN
<b>BT-34</b>	Seller electronic address e.g. VAT number or GLN (can be same as BT-29)
<b>BT-46</b>	Buyer identifier e.g. VAT number or GLN
<b>BT-49</b>	Buyer electronic address e.g. VAT number or GLN (can be same as BT-46)

As this CIUS is simply a restriction on the PEPPOL CIUS, this section outlines the additional elements that must be included.

#### LG mandatory elements

<b>ID</b>	<b>Business Term</b>	<b>Requirement</b>	<b>Previous designation</b>
<b>BT-18</b>	Invoiced Object If an Electricity Bill then MPRN number is used If a Mobile Phone bill then Mobile number is used If a Landline bill then Phone Number	Mandatory	Optional
<b>BT-22</b>	Note If an Electricity Bill then MPRN address is used along with the mode of recording. If a Mobile Phone bill then Subscriber Name is used If a Landline bill then Account Number	Mandatory	
<b>BT-125</b>	Attached Document – the invoice image must be attached	Mandatory	Optional
<b>BT-27</b>	Seller Name (Legal registration name not Trading Name) e.g. as registered in CRO (Companies Registered Office)	Mandatory	Optional
<b>BT-35</b>	Seller Address Line 1 (of the Business Address)	Mandatory	Optional
<b>BT-37</b>	Seller City (of the Business Address)	Mandatory	Optional
<b>BT-44</b>	Buyer Name	Mandatory	Optional

<b>BT-50</b>	Buyer Address line 1 (of the Business Address)	Mandatory	Optional
<b>BT-52</b>	Buyer City (of the Business Address)	Mandatory	Optional
<b>BG-14</b>	INVOICING PERIOD	Mandatory	Optional

The following items may be included in the Invoice but will not be processed if received.

**LG unused /discouraged elements**

<b>ID</b>	<b>Business Term</b>	<b>Requirement</b>	<b>Previous designation</b>
<b>BT-20</b>	Payment Terms	Not used	Conditional
<b>BT-9</b>	Payment due date	Not used	Conditional
<b>BG-16</b>	PAYMENT Instructions	Not used	Optional
<b>BG-17</b>	CREDIT TRANSFER	Not used	Optional
<b>BG-18</b>	PAYMENT CARD INFORMATION	Not used	Optional
<b>BG-19</b>	DIRECT DEBIT	Not used	Optional
<b>BG-20</b>	DOCUMENT LEVEL ALLOWANCES	Not used	Optional
<b>BT-19</b>	Buyer Accounting Reference	Not used	Conditional
<b>BT-121</b>	VAT Exemption Reason Code	Not used	Optional
<b>BG-27</b>	INVOICE LINE ALLOWANCES	Not used	Optional
<b>BG-28</b>	INVOICE LINE Charges	Not used	Optional

The following sections provide more detail and include all requirements and additional help required for a Supplier to Local Government to implement an eInvoicing system compliant with the EN.

4 The following sections provide more detail and include all requirements and additional help required for a Supplier to Local Government to implement an eInvoicing system compliant with the EN.

## **4 The concept "Core invoice"**

### **4.1 The Core invoice**

EN16931-1 and this CIUS are based on the idea that a semantic model with a minimum of elements underlying the electronic invoice facilitates interoperability between billing / accounting systems. The traditional approach is to incorporate all the needs from sectors and various business processes into a comprehensive model. The required element is then bilaterally aligned in a specific situation. By turning this around, bilateral alignment is superfluous. The minimum model must contain those elements which are legally necessary and the elements which, are most commonly used.

This approach results in a so-called core or basic invoice.

## 4.2 Contents of the Core invoice

The model of the basic invoice is based on the assumption that a limited but sufficient set of information elements are needed for most billing functions. These features include the drafting and delivery of the invoice, validation, accounting, VAT reporting, payment and verification. The model contains elements that are commonly used and accepted and are necessary. It is assumed that these elements are already included in most administrative applications.

## 5 Core Invoice Usage Specifications (CIUS)

### 5.1 Introduction

Although the model of the core invoice is relatively simple, it can still contain too many options. It is based on research and discussions arranged between all member states of the EU. Therefore it has many necessary requirements for all Public Bodies across the EU. When all parties agreed on the same requirements, these were made mandatory. If a requirement was not used everywhere but was still seen to be important, then it was made optional. This allowed the user to decide if it was important to them. For this reason, a Core Invoice Usage Specifications (CIUS) is created to show which optional elements are necessary for a specific implementation. A CIUS further limits the model, by reducing optional elements, or restricting their use. A CIUS can also clarify the European standard with a detailed explanation. An invoice that is compliant with a CIUS is by definition compliant with the core invoice.

This document is the Core Invoice Usage specification (CIUS) for use in Irish Local Government. It is also expected to be used to receive and process electronic invoices from other Member States and abroad.

### 5.2 Contents of a CIUS

Every CIUS, including this CIUS, has as its starting point the model defined in EN 16931-1. The CIUS is simply a restriction on that model. According to the EN, it may be restricted in the following ways;

Table 1 — Type of restriction according to EN 16931

Type of change	Example/remark
<b>Business Terms</b>	
Mark conditional Information element not to be used	Can be achieved by changing cardinality 0..x to 0..0. This essentially means that an element which use is conditional is not to be used. This will not affect the receivers processing. Care need to be taken to ensure that the business rules defined for the core invoice model are not broken.
Make semantic definition narrower	A narrower semantic definition of a business term means that the meaning conveyed is still within the meaning defined in the core invoice model and is already recognized by the receiver.
Add synonyms	As synonyms will only supplement the original business terms but do not replace it - the original term is still normative. A receiver who has designed his processing based on the core invoice model can continue to do so. Examples of synonyms are mapping of national or sector terminology to the terminology used in the core invoice.
Add explanatory text	Adding explanatory text that, for example, explains how a business term is used in a specific use case. There is a risk that such text may also affect the semantic definition and this shall be avoided. Explanatory information

Type of change	Example/remark
	does not require any further action from the receiver and the automatic processing of the assigned invoice is still possible.
Cardinality	
Make a conditional element mandatory (0..x - > 1..x)	If a conditional element is made mandatory it simply means that the option of using it is applied. The receiver shall be prepared for the situation that a conditional element is used, so he does not need to modify his processing.
Decrease number of repetitions (x..n - > x..1)	If the number of repetitions is decreased they will remain within the limit that the receiver has catered for.
Semantic data type	
Change semantic data type from string to ...	If the semantic data type of a business term is changed from string to some other type the receiver can still process the value as a string.
Codes and identifiers	
Remove one of multiple defined lists	Where the core invoice semantic model defines more than one allowed list and the core invoice usage specification reduces the number of allowed lists then the invoice instance document is still compliant. However such a change shall leave at least one of the defined lists in place.
Mark defined values as not allowed	If the allowed code values are restricted within an existing list it simply means that certain values of the full list are being used and the receiver should have designed for processing them.
Business Rules	
Add new non-conflicting business rule for existing element(s)	Represents an additional restriction on the allowed content within what is defined for the core invoice model. The receiver should therefore have designed for that content.
Make an existing business rule more restrictive	The exchanged content of the business term remains within what was defined for the core invoice model and the receiver should have designed for it.
Value domain for an element	
Restrict text or byte array length	If a maximum is set on the length where there was no limit the content remains within what was defined for the core invoice model.
Require defined structured values	When the core invoice model does not set a structure on a value the receiver would not have designed for processing in any particular form. Rules to enforce a given pattern should therefore not affect his processing.
Restrict allowed fraction digits	Fewer fraction digits result in a value that is within the accuracy that the receiver would have designed for when implementing the core invoice model.

### 5.3 Syntax Mapping

Syntax mapping maps the semantics of the EN to existing technical standards. It is expected that both UBL 2.1 (CEN/TS 16931-3-2) and UN/CEFACT CII syntax (CEN/TS 16931-3-3) can be used. Whichever syntax is used, the Service Providers involved will ensure that the receiving Public Body will have a syntax transformed that can be automatically imported into their systems.

## **5.4 CIUS identification**

It is expected that the Invoice will contain the PEPPOL CIUS identification scheme, to ensure transportation across the PEPPOL network. Once received from the PEPPOL network the Local Authority (or a service on behalf of the Local Authorities) will check the additional LG requirements.

## **5.5 Compliance**

### **5.5.1 General**

Compliance with the model of EN 16931-1 can be set at three levels:

- At the specification level (the CIUS);
- At the level of implementation of transmitters and receivers;
- At the level of individual invoices.

### **5.5.2 Compliance of the CIUS**

The CIUS is compliant with en 16931-1, since:

- The CIUS supports the business processes outlined in the EN. In addition, the CIUS supports the legal requirements in certain scenarios;
- The CIUS was developed by LGMA Project funded by CEF (EU Commission);
- The CIUS provides detail to the extent to which the model differs from the model of EN 16931-1
- Any invoice that is compliant with the CIUS is also compliant with EN 16931-1;
- The message clearly indicates that it is compliant with the CIUS;
- The CIUS is based on EN 16931-1;
- The syntax binding of the CIUS uses the syntax bindings of CEN/TS 16931-3 and CEN/TS 16931-2, and thus the methodology described in CEN/TS 16931-3-1.

### **5.5.3 Compliance of sending and receiving parties**

A receiving party can claim compliance if they receives and processes all invoices that conform to the model and the business rules of the CIUS. That is, all optional elements in the invoice may be prevented and processed.

A sending party can claim compliance if it sends invoices that contain all the required elements as mentioned in the CIUS and a selection of optional elements, which also comply with all business rules.

### **5.5.4 Individual compliance**

An individual invoice is compliant with the CIUS if it contains all mandatory elements as mentioned in the CIUS and a selection of the optional elements, which also meet all business rules.

## 6 Other

### 6.1 References (order, project code, workflow etc.)

The core invoice has many references to documents and objects. These can and may all be filled if they apply. However, in order to facilitate automatic processing, the Invoiced Object (BT-18) is required. The Invoiced Object includes the MPRN (Meter number) in the case of Electricity Bills, Phone number in the case of Phone Bills and Mobile Number in the case of Mobile Bills.

### 6.2 Identification of departments/organization components

In this CIUS, BT-29 (seller identifier) and BT-46 (Buyer identifier) are recommended as the appropriate elements to be able to identify organisations. These are additional fields to the Legal company registration identifier and the VAT number that are included in other fields.

The PEPPOL CIUS does not allow the use of internal numbers to reference parties in the Invoice. Therefore globally identifiable numbers are used in the Invoice and are mapped to internal numbers on receipt.

### 6.3 Codes

The following restrictions are to be used for Code Lists:

**BT-3 Invoice type/billing type.** This will follow the PEPPOL restriction.

**BT-8 Value Added Tax Point Date Code. Not recommended to use, but if used: Table 12 — Sales tax book Date**

Code	Meaning
3	Invoice
35	Delivery date
432	Payment Date

**BT81 Payment means Type Code. Not used.**

**BT-95, BT-102, BT-118, BT-151 VAT Category Code.** Only the following values are allowed:

Table 14 — Tax Category Code

Code	Meaning
S	Standard rate (low or high)
Z	Zero rate (0%)
E	VAT Exempt
Ae	VAT shifted
K	Intra-Community supply

G	Export outside the EU
<b>Code</b>	<b>Meaning</b>
0	VAT not applicable. This code is not recommended. Use Z Instead.

See also paragraph 7.6.

**BT-121 VAT Exemption Reason code.** Do not use. Code list is not yet available. Use the Code BT-120 VAT Exemption reason text instead.

**BT-125-1 attached Document Mime Code.**

The types of documents that can be sent with the invoice are limited for security reasons. The allowed types are listed in the following table.

Table 15 — Mime Code

Code	Meaning
application/PDF	PDF Document
Image/png	PNG image
Image/jpeg	JPG image
Text/CSV	Comma separated file (spreadsheet)
application/VND. openxmlformatsofficedocument. spreadsheetml. Sheet	Open XML spreadsheet
application/VND. Oasis. Documenting T. spreadsheet	OpenDocument spreadsheet

**BT-130 Invoiced Quantity Unit of measure code.** And **BT150 Item price Base quantity unit of measure code.** All values of UN/ECE REC 20 and UN/ECE REC 21 are allowed. Values of UN/ECE Rec. 21 are preceded by an X. It is recommended to use only the following values:

Table 16 — Units

Code	Meaning (English)	Meaning (English)
EA	Each	The quantity refers to a single unit described in the description or name of the product or service.
VA	Value	The quantity refers to a value rather than a unit

## 6.4 Discounts and charges

Invoices do not typically include discounts and charges – all prices and amounts are net of discounts and charges. However, if they are deemed to be required in some cases, then this must be agreed by both parties in advance.

The following can be specified on the invoice:

- Invoice charge e.g. Carriage on header level .
- As a separate invoice line e.g. a charge is a positive quantity and discount is a negative quantity.

Not all systems support the inclusion of discounts and charges at the invoice level, therefore this needs to be discussed in advance. However, an invoice line must always have a quantity and a price and the price should always be positive.

Discounts and charges must always have a VAT rate if included on an Invoice.

## 6.5 Specification of Totals

### 6.5.1 Calculate

How the different amounts are calculated is in the following table.

**Table 18 — VAT Categories and percentages**

<b>Business Term</b>	<b>Description</b>	<b>Formula</b>
BT-146	Unit Price (excl. Vat)	List Price (BT-148) – Discount on List price (BT-147)
BT-136	Discount Amount	Discount Base Amount (BT-137) * discount rate (BT138)
BT-141	Surcharge Amount	Surcharge Base Amount (BT-142) * Surcharge percentage (BT143)
BT-131	NET Line amount (excl. VAT)	Invoiced Quantity (BT-129) * Unit Price (excl. VAT) (BT-146)/Price base quantity (BT-149) + Surcharge Amount (BT-141) – Discount Amount (BT-136)
BT-92	Discount Amount	Discount Base Amount (BT-93) * Discount percentage (BT-94)
BT-99	Surcharge Amount	Surcharge Base Amount (BT-100) * Surcharge percentage (BT101)
<b>Business Term</b>	<b>Description</b>	<b>Formula</b>
BT-106	Total net line Amount	SUM (NET line amount (excl. VAT) (BT-131))
BT-107	Total amount of invoice level discounts	SOM (discount amount (BT-92))
BT-108	Invoice level charges total amount	SUM (surcharge Amount (BT-99))
BT-109	Invoice Total excl. VAT	Total net line amount (BT-106) – Invoice level Discounts (BT-107) + Total amount of invoice level charges (BT-108)

BT116	VAT Base Amount	SUM (NET line amount (excl. VAT) (BT-131)) + SUM (surcharge Amount (BT-99)) – SUM (discount amount (BT-92)) Per VAT Category (BT-151, BT-95, BT-102) and-percentage (BT-152, BT-96, BT-103)
BT-117	Sales Tax Amount	VAT Basis Amount (BT-116) * VAT Rate (BT-119) Per VAT Category (BT-151, BT-95, BT-102) and-percentage (BT-152, BT-96, BT-103)
BT-110	Sales tax Total	Sum (VAT Amount (BT-117))
BT-112	Invoice Total incl. vat	Invoice Total excl. VAT (BT-109) + VAT Total (BT-110)
BT-115	Total amount Payable	Invoice Total incl. VAT (BT-112) – Amount already paid (BT113) + Rounding Amount (BT-114)

### 6.5.2 How to deal with rounding differences.

There are no rounding differences in the invoice itself. The VAT bases are added first and then multiplied by the VAT percentage. In accounting systems that first calculate VAT per line and add up those amounts, they can have rounding differences and therefore an amount that differs from the sales tax total amount on the invoice. It is recommended that you post the amounts that are listed on the invoice.

The amount of rounding (BT-114) applies where the eInvoice recalculated total differs from the actual total from the original system.

## 6.6 Invoice Period

The period in which the invoice should be posted and VAT declaration must be made is determined by the contents of the following elements:

- BT-2 Invoice Issue Date (**Invoice date**)
- BG-14-Invoicing period (**Billing period**, Usually the period of delivery of goods or services)
- BT-72 Actual Delivery Date (**Actual delivery date**)
- BG-26 Invoice line period, Usually the period of delivery of goods or services for a specific line item)

The following rules apply (at the time of publication of this CIUS):

You calculate the sales tax based on the invoices that you have sent in the period that you are reporting. The date of the invoice determines in which period you must indicate the VAT. Send your invoice no later than the 15th day after the month in which you delivered the goods or services. If you have sent an invoice later, you must indicate the VAT in the period in which the invoice should have been declared.

This is relevant for VAT rate changes and for large amounts that go over the annual limit.

The period in which the declaration is to be made can also be explicitly stated in the invoice with BT-7 value Added tax point date or BT-8 value Added tax point date code. However, it is not recommended to fill these elements in the CIUS..

In some industries (energy, Telecom) the invoice or delivery period is also indicated at the line level in BG-26 invoice line period.

## **7 The semantic data model**

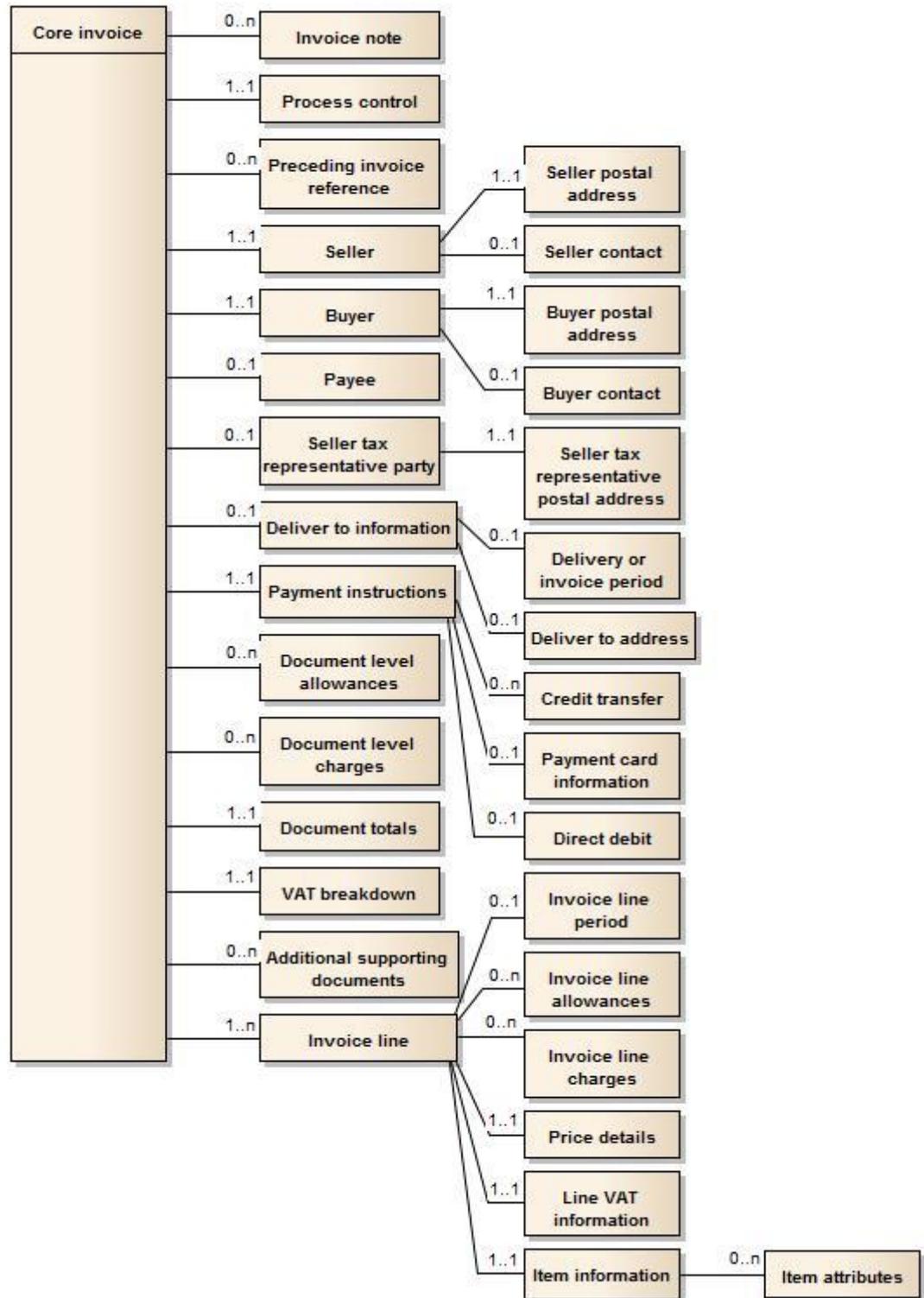
### **7.1 Introduction**

This chapter describes the data model of the core invoice. The data model consists of a number of information elements and groups of information elements. In addition, a number of business rules apply.

The data model and the Business rules determine whether an individual invoice meets the technical requirements of the CIUS and of EN 16931-1. They do not define whether an invoice meets legal and contractual requirements. The sender of the invoice is always responsible for the contents of the invoice.

Figure 14 gives an overview of the groups of information elements that can appear in the invoice. These groups and the information elements they contain are described in table 21.

The business rules are listed in section 7.3.



Note The picture shows only the element groups. Individual elements are listed in table 21. **Figure 14**

— Overview of the semantic model

## 7.2 Legend

Each data element and each group of data elements in the model is represented by a row in Figure 14. Table 19 below shows the legend.

Table 1 - Legend for the Semantic Data Model table

Id	Level	Cardinality	Business Term	Description	CIUS	CIUS Note
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ID: The identification number of the information element (BT-business term) or group of information elements (BG-business terms group). The numbers are not necessarily sequential.

Level: Specifies at what level in the model the information element is included: — +:

Heading level;

— + +: The second level. The element is part of a group on the heading level;

— + + +: The third level. The element is part of a group on the second Level

— + + + +: The fourth level. The element is part of a third-level group

Cardinality: Used to indicate whether the element or group is mandatory or optional, and whether the element/group can be repeated. The cardinality applies within the group of which the element belongs. If that group is optional and the element is mandatory, the element only needs to appear when the group is filled.

The following cardinality can be indicated:

— 1.. 1: Obligatory, do not repeat;

— 1.. N: Obligatory and can be repeated (at least one instance must occur);

— 0.. 1: optional, not repeating;

— 0.. N: Optional and repeating.

Business Term: The name of the information element as it is used in the model. Under the name is in red the Irish term mentioned.

Description: A description of the information element and any usage rules.

CIUS:

This column lists how the CIUS restricts the element.

The following table shows CIUS type in parentheses the number of the type restriction from table 1.

Table 2- CIUS Types

CIUS type	Abbreviation	Meaning
None		It is evident how the field should be applied in this context and it is identical to the wording in the EN.
Restriction: Not allowed	N	This element is not allowed.
Restriction: Mandatory	M	This element is always required in every invoice to be able to receive/process it.
Restriction	R	The presence of this element is restricted.
Restriction: Conditional use	C	This element is subject to conditions (e.g. obligatory in certain situations). See CIUS specification for conditions.
Discouraged or unused	For simplicity unused or discouraged elements are not included	Use of this element is discouraged. In most implementations, the information in this element will not be processed for the invoice.  In order to maintain interoperability with other EU countries, this element is <u>Not</u> Prohibited.
Usage Note	U	Further guidance or filling advice; An additional advice is given on how this field should/can be applied.

### 7.3 The semantic model

Note: BT-9 Payment due date or BT-20 Payment terms should be included for compliance. However this will be ignored as the Prompt Payment Policy will determine payment of less than 15 days once accepted for processing.

**Table 21 — Semantic data model of the basic invoice**

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BT-1	+	1..1	Invoice number	A unique identification of the Invoice.		
BT-2	+	1..1	Invoice issue date	The date when the Invoice was issued.		
BT-3	+	1..1	Invoice type code	A code specifying the functional type of the Invoice.		
BT-5	+	1..1	Invoice currency code	The currency in which all Invoice amounts are given, except for the Total VAT amount in accounting currency.		
BT-13	+	0..1	Purchase order reference	An identifier of a referenced purchase order, issued by the Buyer.	U	A PO is optional as it is not expected
BT-18	+	0.. 1	Invoiced Object Identifier	An identifier for an object on which the invoice is based, given by the seller.	M	In the case of Utility Bills this must be used to store the MPRN number (Meter number) or the phone number etc
BG-1	+	0..n	INVOICE NOTE	A group of business terms providing textual notes that are relevant for the invoice, together with an indication of the note subject.		

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BT-22	++	1..1	Invoice note	A textual note that gives unstructured information that is relevant to the Invoice as a whole.	U	Used to contain additional information such as MPRN Address (Utility Bill), Account name (Mobile Phone) or Subscriber name. It may also include Invoice Clauses. This is purely for visualisation therefore it does not matter how they are included here.
BG-2	+	1..1	PROCESS CONTROL	A group of business terms providing information on the business process and rules applicable to the Invoice document.	U	Use as required by PEPPOL
BT-23	++	0..1	Business process type	Identifies the business process context in which the transaction appears, to enable the Buyer to process the Invoice in an appropriate way.		PEPPOL CIUS Process Type is used
BT-24	++	1..1	Specification identifier	An identification of the specification containing the total set of rules regarding semantic content, cardinalities and business rules to which the data contained in the instance document conforms.		PEPPOL CIUS Identifier is used
BG-4	+	1..1	SELLER	A group of business terms providing information about the Seller.		
BT-27	++	1..1	Seller name	The full formal name by which the Seller is registered in the national registry of legal entities or as a Taxable person or otherwise trades as a person or persons.	U	Names in the invoice are for informational use. Names are held on the ERP Master Files and are updated by other means
BT-28	++	0..1	Seller trading name	A name by which the Seller is known, other than Seller name (also known as Business name).		

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BT-29	++	0..n	Seller identifier	An identification of the Seller.	M	Only valid PEPPOL Identifiers and schemes can be used. This field is used in addition to the registration number Supplier (BT-30) and the VAT number (BT-31) to identify the Supplier
		0..1	Scheme identifier	The identification scheme identifier of the Seller identifier.		
BT-30	++	0..1	Seller legal registration identifier	An identifier issued by an official registrar that identifies the Seller as a legal entity or person.	C	Use a valid business registration number as issued by cro.ie. Irish Limited companies must provide the CRO number.
		0..1	Scheme identifier	The identification scheme identifier of the Seller legal registration identifier.		
BT-31	++	0..1	Seller VAT identifier	The Seller's VAT identifier (also known as Seller VAT identification number).	C	This field is the VAT number of the supplier. If registered for VAT, you must provide a VAT number  Irish VAT numbers must be prefixed by IE
BT-34	++	0..1	Seller electronic address	Identifies the Seller's electronic address to which the application level response to the invoice may be delivered.	M	Used in accordance with PEPPOL CIUS
		1..1	Scheme identifier	The identification scheme identifier of the Seller electronic address.		
BG-5	++	1..1	SELLER POSTAL ADDRESS	A group of business terms providing information about the address of the Seller.	U	Addresses are used for visualisation and to comply with VAT requirements

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BT-35	+++	0..1	Seller address line 1	The main address line in an address.	M	First line of address e.g. Street
BT-36	+++	0..1	Seller address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		
BT-162	+++	0..1	Seller address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		
BT-37	+++	0..1	Seller city	The common name of the city, town or village, where the Seller address is located.	M	City or Town is required for visualisation
BT-38	+++	0..1	Seller post code	The identifier for an addressable group of properties according to the relevant postal service.		
BT-40	+++	1..1	Seller country code	A code that identifies the country.		
BG-6	++	0..1	SELLER CONTACT	A group of business terms providing contact information about the Seller.	U	Contact not required
BT-41	+++	0..1	Seller contact point	A contact point for a legal entity or person.	U	Could contain a contact name
BT-42	+++	0..1	Seller contact telephone number	A phone number for the contact point.	U	A contact number would be useful to help resolve issues
BT-43	+++	0..1	Seller contact email address	An e-mail address for the contact point.		
BG-7	+	1..1	BUYER	A group of business terms providing information about the Buyer.		
BT-44	++	1..1	Buyer name	The full name of the Buyer.		
BT-45	++	0..1	Buyer trading name	A name by which the Buyer is known, other than Buyer name (also known as Business name).		
BT-46	++	0..1	Buyer identifier	An identifier of the Buyer.	M	This Identifier should comply with the PEPPOL CIUS requirements

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
		0..1	Scheme identifier	The identification scheme identifier of the Buyer identifier.		
BT-47	++	0..1	Buyer legal registration identifier	An identifier issued by an official registrar that identifies the Buyer as a legal entity or person.		
		0..1	Scheme identifier	The identification scheme identifier of the Buyer legal registration identifier.		
BT-48	++	0..1	Buyer VAT identifier	The Buyer's VAT identifier (also known as Buyer VAT identification number).	C	must be included for RCT and reverse charge VAT – see 7.4 below
BT-49	++	0..1	Buyer electronic address	Identifies the Buyer's electronic address to which the invoice is delivered.		
		1..1	Scheme identifier	The identification scheme identifier of the Buyer electronic address.	M	This Identifier should comply with the PEPPOL CIUS requirements
BG-8	++	1..1	BUYER POSTAL ADDRESS	A group of business terms providing information about the postal address for the Buyer.	U	Addresses are used for visualisation and to comply with VAT requirements
BT-50	+++	0..1	Buyer address line 1	The main address line in an address.	M	1 <sup>st</sup> line of address e.g. Street name
BT-51	+++	0..1	Buyer address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		
BT-163	+++	0..1	Buyer address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		
BT-52	+++	0..1	Buyer city	The common name of the city, town or village, where the Buyer's address is located.	M	City or Town is required
BT-53	+++	0..1	Buyer post code	The identifier for an addressable group of properties according to the relevant postal service.		
BT-55	+++	1..1	Buyer country code	A code that identifies the country.		

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BG-9	++	0..1	BUYER CONTACT	A group of business terms providing contact information relevant for the Buyer.	U	Contact not required
BT-56	+++	0..1	Buyer contact point	A contact point for a legal entity or person.		
BT-57	+++	0..1	Buyer contact telephone number	A phone number for the contact point.		
BT-58	+++	0..1	Buyer contact email address	An e-mail address for the contact point.		
BG-14	++	0.. 1	INVOICING PERIOD	A Group of Business terms providing information on the invoice period.	M	Required to show Dates of Supply
BT-73	+++	0.. 1	Invoicing Period Start date	The date when the Invoice period starts.	M	Required to show start date of Supply
BT-74	+++	0.. 1	Invoicing Period End Date	The date when the Invoice period ends.	M	Required to show end date of Supply
BG-21	+	0..n	DOCUMENT LEVEL CHARGES	A group of business terms providing information about charges and taxes other than VAT, applicable to the Invoice as a whole.	U	May be required for transport charges
BT-99	++	1..1	Document level charge amount	The amount of a charge, without VAT.		
BT-102	++	1..1	Document level charge VAT category code	A coded identification of what VAT category applies to the document level charge.	U	VAT must be specified if charges are used
BT-103	++	0..1	Document level charge VAT rate	The VAT rate, represented as percentage that applies to the document level charge.		
BT-104	++	0..1	Document level charge reason	The reason for the document level charge, expressed as text.		
BG-22	+	1..1	DOCUMENT TOTALS	A group of business terms providing the monetary totals for the Invoice.		
BT-106	++	1..1	Sum of Invoice line net amount	Sum of all Invoice line net amounts in the Invoice.	U	Σ BT-131

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BT-108	++	0..1	Sum of charges on document level	Sum of all charges on document level in the Invoice.	U	$\Sigma$ BT-99
BT-109	++	1..1	Invoice total amount without VAT	The total amount of the Invoice without VAT.	U	BT-106 + BT-107 + BT108
BT-110	++	0..1	Invoice total VAT amount	The total VAT amount for the Invoice.	U	$\Sigma$ BT-117
BT-111	++	0..1	Invoice total VAT amount in accounting currency	The VAT total amount expressed in the accounting currency accepted or required in the country of the Seller.	D	is not used in practice. is ignored.
BT-112	++	1..1	Invoice total amount with VAT	The total amount of the Invoice with VAT.	U	BT-109 + BT-110
BT-114	++	0..1	Rounding amount	The amount to be added to the invoice total to round the amount to be paid.	U	Used to hold the difference between the standard calculated total and the Amount calculated by the ERP system – if different
BT-115	++	1..1	Amount due for payment	The outstanding amount that is requested to be paid.	U	BT-112 + BT114
BG-23	+	1..n	VAT BREAKDOWN	A group of business terms providing information about VAT breakdown by different categories, rates and exemption reasons	U	At header level this is used to calculate VAT amounts. Vat amounts are not calculated at line level
BT-116	++	1..1	VAT category taxable amount	Sum of all taxable amounts subject to a specific VAT category code and VAT category rate (if the VAT category rate is applicable).		
BT-117	++	1..1	VAT category tax amount	The total VAT amount for a given VAT category.		
BT-118	++	1..1	VAT category code	Coded identification of a VAT category.		
BT-119	++	0..1	VAT category rate	The VAT rate, represented as percentage that applies for the relevant VAT category.		

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BT-120	++	0..1	VAT exemption reason text	A textual statement of the reason why the amount is exempted from VAT or why no VAT is being charged		
BG-24	+	0..n	ADDITIONAL SUPPORTING DOCUMENTS	A group of business terms providing information about additional supporting documents substantiating the claims made in the Invoice.	U	Used to include an image of the Invoice (e.g. pdf). If available
BT-122	++	1..1	Supporting document reference	An identifier of the supporting document.		
BT-125	++	0..1	Attached document	An attached document embedded as binary object or sent together with the invoice.	M	<p>The original Invoice image must be included. This ensures all other information is available for visualisation as needed.</p> <p>The image (e.g. PDF) is embedded as encoded Base 64 representation of the Invoice</p> <p>See Binary object explanation below</p>
		1..1	Attached document Mime code	The mime code of the attached document.		
		1..1	Attached document Filename	The file name of the attached document		
BG-25	+	1..n	INVOICE LINE	A group of business terms providing information on individual Invoice lines.		
BT-126	++	1..1	Invoice line identifier	A unique identifier for the individual line within the Invoice.	U	A unique number for each line
BT-129	++	1..1	Invoiced quantity	The quantity of items (goods or services) that is charged in the Invoice line.		

ID	Level	Cardinality	Business Term	Description	CIUS abbreviation	CIUS Note
BT-130	++	1..1	Invoiced quantity unit of measure code	The unit of measure that applies to the invoiced quantity.	U	Can use PEPPOL code list but only require EA or M4. M4 indicates that the quantity is actually a value.
BT-131	++	1..1	Invoice line net amount	The total amount of the Invoice line.		
BG-29	++	1..1	PRICE DETAILS	A group of business terms providing information about the price applied for the goods and services invoiced on the Invoice line.		
BT-146	+++	1..1	Item net price	The price of an item, exclusive of VAT, after subtracting item price discount.		
BT-147	+++	0..1	Item price discount	The total discount subtracted from the Item gross price to calculate the Item net price.		
BG-30	++	1..1	LINE VAT INFORMATION	A group of business terms providing information about the VAT applicable for the goods and services invoiced on the Invoice line.		
BT-151	+++	1..1	Invoiced item VAT category code	The VAT category code for the invoiced item.		
BT-152	+++	0..1	Invoiced item VAT rate	The VAT rate, represented as percentage that applies to the invoiced item.		
BG-31	++	1..1	ITEM INFORMATION	A group of business terms providing information about the goods and services invoiced.		
BT-153	+++	1..1	Item name	A name for an item.		
BG-32	+++	0.. n	ITEM attributes	A Group of Business terms providing information about properties of the goods and services invoiced.	U	Not currently used but can be used to add additional attributes of the line item
BT-160	++++	1.. 1	Item attribute Name	The name of the attribute or property of the item.	U	Not currently used but can be used to add additional name attributes of the line item
BT-161	++++	1.. 1	Item attribute value	The value of the attribute or property of the item.	U	Not currently used but can be used to add additional valueattributes of the line item

## 7.4 Business logic

### 7.4.1 Integrity rules

Integrity rules indicate which elements are mandatory and which elements require the content (for example, no negative values are allowed).

**Table 22 — Business rules-Integrity rules**

Id	Description	Target/Context	Business term/group
BR-1	An Invoice shall have a specification identifier (BT-24). <b>Each invoice has a CIUS or extension number (BT-24)</b>	Process Control	BT-24
BR-2	An invoice shall have an invoice number (BT-1). <b>Each invoice has an invoice number (BT-1)</b>	Invoice	BT-1
BR-3	An invoice shall have an invoice issue date (BT-2). <b>Each invoice has an invoice date (BT-2)</b>	Invoice	BT-2
BR-4	An invoice shall have an invoice type code (BT-3). <b>Each invoice has an invoice type (BT-3)</b>	Invoice	BT-3
BR-5	An invoice shall have an invoice currency code (BT-5). <b>Each invoice has an invoice currency code (BT-5)</b>	Invoice	BT-5
BR-6	An Invoice shall contain the seller name (BT-27). <b>Each invoice contains the name supplier (BT-27)</b>	Seller	BT-27
BR-7	An Invoice shall contain the Buyer name (BT-44). <b>Each invoice contains the name customer (BT-44)</b>	Buyer	BT-44
BR-8	An Invoice shall contain the seller postal address (BG-5). <b>Each invoice contains the address vendor (BG-5)</b>	Seller	BG-5
BR-9	THE Seller Postal Address (BG-5) should contain a seller country code (BT-40). <b>The vendor address contains the vendor Country code (BT40)</b>	Seller Postal Address	BT-40
BR-10	An Invoice shall contain the Buyer postal address (BG-8). <b>Each invoice contains the address taker (BG-8)</b>	Buyer	BG-8
BR-11	THE Buyer postal address shall contain a buyer country code (BT-55). <b>The addressee contains the recipient country code (BT-55)</b>	Buyer Postal Address	BT-55

BR-12	An invoice shall have the Sum of invoice line net amount (BT106). <b>Each invoice contains the total net line amount (BT-106)</b>	Document totals	BT-106
BR-13	An invoice shall have the invoice total amount without VAT (BT-109). <b>Each invoice contains the invoice Total excl. VAT (BT-109)</b>	Document totals	BT-109

Id	Description	Target/Context	Busines S term/group
BR-14	An invoice shall have the invoice total amount with VAT (BT112). <b>Each invoice contains the invoice Total incl. VAT (BT-112)</b>	Document totals	BT-112
BR-15	An Invoice shall have the Amount due for payment (BT-115). <b>Each invoice contains the total amount to be paid (BT-115)</b>	Document totals	BT-115
BR-16	An invoice shall have at least one invoice line (BG-25). <b>Each invoice has at least one invoice line (BG-25)</b>	Invoice	BG-25
BR-21	Each Invoice Line (BG-25) shall have an invoice line identifier (BT-126). <b>Each invoice line (BG-25) has an invoice line number (BT-126).</b>	Invoice Line	BT-126
BR-22	Each Invoice Line (BG-25) shall have an invoiced quantity (BT-129). <b>Each invoice line (BG-25) has an invoiced quantity (BT-129).</b>	Invoice Line	BT-129
BR-23	An Invoice line (BG-25) shall have an invoiced Quantity unit of measure code (BT-130). <b>Each invoice line (BG-25) has an invoiced unit (BT-130).</b>	Invoice Line	BT-130

Id	Description	Target/Context	Busines S term/group
BR-24	Each Invoice Line (BG-25) shall have an Invoice line net amount (BT-131). <b>Each invoice line (BG-25) has a net line amount (excl. VAT) (BT-131).</b>	Invoice Line	BT-131

BR-25	Each Invoice Line (BG-25) shall contain the Item name (BT153). <b>Each invoice line (BG-25) has a product name (BT153).</b>	Item Information	BT153
BR-26	Each Invoice Line (BG-25) shall contain the Item net price (BT-146). <b>Each invoice line (BG-25) has a unit price (excl. VAT) (BT-146).</b>	Price Details	BT-146
BR-27	The Item Net Price (BT-146) shall NOT be negative. <b>The Unit Price (excl. VAT) (BT-146) must not be negative.</b>	Item Net Price	BT-146
BR-28	The Item Gross Price (BT-148) shall NOT be negative. <b>The list price (BT-148) must not be negative.</b>	Price Details	BT-148
BR-29	the Invoicing period End date (BT-74) shall be later or equal to the Invoicing period start date (BT-73). <b>If the invoice Period Start date (BT-73) and Invoice period (BT-74) Both are given, then the end date invoice period (BT-74) is later or simultaneously with the invoice Period start date (BT-73).</b>	Invoicing Period	BT-74
BR-30	If both Invoice line period Start date (BT-134) and Invoice line period End date (BT-135) are given then the invoice line period end date (BT-135) shall be later or equal to the invoice line period start date (BT-134). <b>If the start date invoice line period (BT-134) and invoice line expiration date (BT-135) Both are given, then the end date invoice line period (BT135) arrives later or simultaneously with the start date invoice line period (BT-134).</b>	Invoice Line Period	BT-135
BR-31	Each Document level allowance (BG-20) shall have a Document level allowance amount (BT-92). <b>Every discount at document level (BG-20) has a discount amount (BT-92).</b>	Document Level allowances	BT-92
BR-32	Each Document level allowance (BG-20) shall have a Document level allowance VAT category code (BT-95). <b>Any discount on document level (BG-20) has a discount VAT code (BT-95).</b>	Document Level allowances	BT-95

Id	Description	Target/Context	Busines S term/group
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BR-33	Each Document level allowance (BG-20) shall have a document level allowance reason (BT-97) or a document level allowance reason code (BT-98). <b>Any discount on document level (BG-20) has a discount reason (BT-97) or a discount reason code (BT-98).</b>	Document Level allowances	BT-97, BT-98
BR-36	Each document level Charge (BG-21) shall have a document level charge amount (BT-99). <b>Each supplement at the document level (BG-21) has a surcharge (BT-99).</b>	Document level charges	BT-99
BR-37	Each document level Charge (BG-21) shall have a document level charge VAT category code (BT-102). <b>Each supplement at the document level (BG-21) has a surcharge VAT code (BT-102).</b>	Document level charges	BT-102
BR-38	Each Document level Charge (BG-21) shall have a document level charge reason (BT-104) or a document level charge reason code (BT-105). <b>Each supplement at document level (BG-21) has an additional charge reason (BT-104) or a surcharge reason code (BT-105).</b>	Document level charges	BT-104, BT-105
BR-41	Each Invoice line allowance (BG-27) shall have an Invoice line allowance amount (BT-136). <b>Each discount on invoice line level (BG-27) has a discount amount (BT-136).</b>	Invoice Line Allowances	BT-136
BR-42	Each Invoice Line allowance (BG-27) Shall have an invoice line allowance reason (BT-139) or an invoice line allowance reason code (BT-140). <b>Each discount on invoice line level (BG-27) has a Discount Reason (BT-139) or a discount reason code (BT-140)</b>	Invoice Line Allowances	BT-144, BT-145
BR-43	Each Invoice line Charge (BG-28) shall have an invoice line charge amount (BT-141). <b>Each charge on invoice line level (BG-28) has an additional charge amount (BT-141)</b>	Invoice line Charges	BT-141
BR-44	Each Invoice line Charge (BG-28) shall have an invoice line charge reason (BT-144) or an invoice line charge reason code (BT-145). <b>Any surcharge on invoice line level (BG-28) has an additional charge reason (BT-144) or a surcharge reason code (BT-145)</b>	Invoice line Charges	BT-139, BT-140
BR-45	Each VAT Breakdown (BG-23) shall have a VAT category taxable amount (BT-116). <b>Each VAT calculation per category/percentage (BG-23) has a VAT Base amount (BT-116).</b>	VAT breakdown	BT-116

BR-46	Each VAT Breakdown (BG-23) shall have a VAT category tax amount (BT-117).	VAT breakdown	BT-117
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Id	Description	Target/Context	Business term/group
	Each VAT calculation per category/percentage (BG-23) has a VAT amount (BT-117).		
BR-47	Each VAT Breakdown (BG-23) shall be defined through a VAT category code (BT-118). Each VAT calculation per category/percentage (BG-23) is defined by a VAT category code (BT-118).	VAT breakdown	BT-118
BR-48	Each VAT Breakdown (BG-23) shall have a VAT category rate (BT-119), except if the Invoice is not subject to VAT. Each VAT calculation per category/percentage (BG-23) has a VAT percentage (BT-119), except if the invoice is not subject to VAT.	VAT breakdown	BT-119
BR-49	A Payment Instruction (BG-16) shall specify the payment means type code (BT-81). A Payment instruction (BG-16) Specifies The Code Payment Method (BT-81).	Payment Instructions	BT-81
BR-50	A Payment Account identifier (BT-84) shall be present if Credit transfer (BG-17) information is provided in the Invoice. An account number (BT-84) is present if the bank transfer (BG-17) information is given in the invoice.	Account Information	BT-84
BR-51	The last 4 to 6 digits of the Payment card primary account number (BT-87) Shall Be Present If Payment Card information (BG-18) is provided in the Invoice. The last 4 to 6 digits of a number debit card (BT87) are present if the information Payment Card (BG-18) is given in the invoice.	Card Information	BT-87
BR-52	Each Additional Supporting Document (BG-24) shall contain a supporting document reference (BT-122). Each Factuurondersteunend document (BG-24) contains a document number (BT-122).	Additional Supporting documents	BT-122

BR-53	If the VAT Accounting currency code (BT-6) is present, then the Invoice total VAT amount in accounting currency (BT111) shall be provided. <b>If the VAT currency code (BT-6) is present, then the VAT Total in Boekingvaluta (BT-111) given.</b>	Document totals	BT-111
BR-54	Each Item Attribute (BG-32) shall contain an item attribute name (BT-160) and an item attribute value (BT-161). <b>Each Product attribute (BG-32) contains an attribute name (BT-160) and an attribute value (BT-161).</b>	Item attributes	BT-160, BT-161

Id	Description	Target/Context	Business term/group
BR-62	THE Seller Electronic address (BT-34) shall have a Scheme identifier. <b>Each electronic address provider (BT-34) has an identification scheme.</b>	Seller Electronic Address	BT-34
BR-63	The Buyer Electronic address (BT-49) shall have a Scheme identifier. <b>Any Electronic address Taker (BT-49) has an identification scheme.</b>	Buyer Electronic Address	BT-49

#### 7.4.2 Conditions

Conditions indicate dependencies between elements **Table 23 — Business rules – conditions**

Id	Description	Target/Context	Business term/Group
BR-CO-4	Each Invoice Line (BG-25) shall be categorized with an invoiced item VAT category code (BT-151). <b>Each invoice line (BG-25) is categorized with a VAT category code (BT-151).</b>	Invoice Line	BT-151
BR-CO-9	The Seller VAT identifier (BT-31) and the Buyer VAT identifier (BT-48) shall have a prefix in accordance with ISO code ISO 3166-1 Alpha-2 by which the country of issue may be identified. Nevertheless, Greece may use The prefix ' EL '.	VAT identifiers	BT-31, BT-48, BT-63

Id	Description	Target/Context	Business term/Group
BR-CO-10	Sum of Invoice Line net amount (BT-106) = $\sum$ Invoice Line net amount (BT-131). <b>The total net line amount (BT-106) = <math>\sum</math> NET Line amount (excl. VAT) (BT-131).</b>	Document totals	BT-106
BR-CO-11	Sum of allowances on document level (BT-107) = $\sum$ Document level allowance Amount (BT-92). <b>The total amount of invoice level discounts (BT-107) = <math>\sum</math> Discount Amount (BT-92).</b>	Document totals	BT-107
BR-CO-12	Sum of charges on document level (BT-108) = $\sum$ Document level charge Amount (BT-99). <b>The total amount of invoice level charges (BT-108) = <math>\sum</math> Surcharge Amount (BT-99).</b>	Document totals	BT108
BR-CO-13	Invoice Total amount without VAT (BT-109) = $\sum$ Invoice Line net amount (BT-131)-sum of allowances on document level (BT-107) + Sum of charges on document level (BT-108). <b>Invoice Total excl. VAT (BT-109) = <math>\sum</math> NET Line amount (excl. VAT) (BT-131) - Total amount of invoice level discounts (BT-107) + Total amount of invoice level charges (BT-108).</b>	Document totals	BT-109
BR-CO-14	Invoice Total VAT Amount (BT-110) = $\sum$ VAT category Tax Amount (BT-117). <b>Sales tax Total (BT-110) = <math>\sum</math> VAT Amount (BT-117).</b>	Document totals	BT-110
BR-CO-15	Invoice total amount with VAT (BT-112) = Invoice total amount without VAT (BT-109) + Invoice total VAT amount (BT-110). <b>Invoice Total incl. VAT (BT-112) = Invoice Total excl. VAT (BT-109) + VAT Total (BT-110).</b>	Document totals	BT-112
BR-CO-16	Amount due for payment (BT-115) = Invoice Total amount with VAT (BT-112)-Paid amount (BT-113) + Rounding amount (BT-114). <b>Total amount payable (BT-115) = Invoice Total incl. VAT (BT-112) - Amount already paid (BT-113) + Rounding amount (BT-114).</b>	Document totals	BT-115

BR-CO-17	VAT Category Tax amount (BT-117) = VAT Category Taxable Amount (BT-116) x (VAT category rate (BT-119)/100), rounded to two decimals. <b>VAT Amount (BT-117) = VAT Basis Amount (BT116) x (VAT percentage (BT-119)/100), rounded up to two decimal places.</b>	VAT breakdown	BT-117
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Id	Description	Target/Context	Business term/Group
BR-CO-18	An Invoice shall at least have one VAT breakdown group (BG-23). <b>An invoice has at least one VAT calculation per category/percentage (BG-23).</b>	VAT breakdown	BG-23
BR-CO-19	the Invoicing Period start date (BT-73) and the Invoicing period end date (BT74) shall both be filled.	Delivery or Invoice Period	BT-73, BT-74
BR-CO-20	If Invoice Line period (BG-26) is used, the invoice line period start date (BT-134) or the invoice line period end date (BT-135) shall be filled, or both.	Invoice Line Period	BT-134, BT-135

Id	Description	Target/Context	Business term/Group
BR-CO-26	In order for the buyer to automatically identify a supplier, the seller identifier (BT-29), the seller legal registration identifier (BT-30) and/or the seller VAT identifier (BT-31) shall be present.	Seller	BT-29, BT-30, BT-31

For the restrictions in DE CIUS Apply the following additional business rules:

**Table 24 — Business Rules-CIUS**

Id	Description	Business term/Group
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BR-IE-1	For Irish suppliers (BT-40 = IE) must be listed in the Supplier registration number or the (BT-30 with Scheme ID = 106), or the CRO number (BT-30 with Scheme id = 190).	BT-30
BR-IE-2	For Irish suppliers (BT-40 = en) The invoice must contain either the purchase order number (BT-13) or if a Utility Company the MPRN.	BT-10, BT-13
BR-IE-3	For Irish suppliers (BT-40 = IE), the address provider (BG-5) must be the Address line 1 supplier (BT-35), the postal code supplier (BT-38) and the placename vendor (BT37).	BG-5
BR-IE-4	If the supplier is located in Ireland (BT-40 = IE), for Irish customers (BT-55 = IE) The address taker (BG8) must be the Address line 1 customer (BT-50), the postal code taker (BT-53) and the placename customer (BT-52).	BG-8
BR-IE-5	If the supplier is located in Ireland (BT-40 = IE), for Irish fiscal representatives (BT-69 = IE) The address of the fiscal representative, if it is specified, the Address line 1 fiscal representative (BT-64), the Postal Code fiscal representative (BT-67) and the placename fiscal representative (BT-66) contain.	BG-12
BR-IE-7	The invoice type (BT-3) may have a value of 380, 384, 389 or 381.	BT-3

Id	Description	Business term/Group
BR-IE-8	If the invoice type (BT-3) The value 381 has the UBL schedule for the Credit note to be used, for all other values the UBL schedule for the invoice.	BT-3
BR-IE-9	If the supplier is located in Ireland (BT-40 = IE) and if the invoice type (BT-3) has a value of 384 (correction Invoice), the previous invoice number (BT-25) must be filled.	BT-25
BR-IE-10	If the supplier is located in Ireland (BT-40 = IE), for Irish customers (BT-55 = IE) In the customer registration number, either The KvK number is listed (BT-47 with Scheme ID = 106), or the OIN number (BT-47 with Scheme ID = 190).	BT-47
BR-IE-11	It is obligatory for Irish suppliers (BT-40 = IE) to pay the payment instructions BG-16 if the payment of the customer goes to the supplier.	BG-16
BR-IE-12	The Code payment method (BT-81) may have the values 58, 59, 57, 49, 30 or 48 for Irish suppliers (BT-40 = IE).	BT-81

The CIUS also contains a number of recommendations. Invoices that do not follow these recommendations may be correct and do not need to be rejected. In a test period it may be important to avoid failure to comply with the recommendationsN in warnings. The following business rules are intended for this purpose.

**Table 25 — CIUS recommendations**

Id	Description	Business term/Group
BR-IE-19	The use of VAT currency code (BT-6) is not recommended.	BT-6
BR-IE-20	The use of the VAT Posting date (BT-7) is discouraged and if it is ignored.	BT-7
BR-IE-21	The use of the VAT Posting date code (BT-8) is discouraged and if it is ignored.	BT-8
BR-IE-22	The use of note subject (BT-21) is not recommended. Match the customer with a good reason code.	BT-21
BR-IE-23	The use of process type (BT-23) is not recommended unless a value is required by the transmission community.	BT23
BR-IE-24	The use of previous invoice date (BT-26) is not recommended.	BT-26
BR-IE-25	The use of tax number (BT-32) is not recommended because it does not apply to Irish suppliers.	BT-32

Id	Description	Business term/Group
BR-IE-28	In Ireland, the province (BT-39, BT-54, BT-68, BT-79) is not used. The use is not recommended, but is allowed.	BT-39, BT-54, BT-68, BT-79
BR-IE-35	The use of reason code for VAT exemption (BT-121) is not recommended.	BT-121

**Table 29 — Business rules - VAT Exempt**

Id	Description
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BR-E-2	<p>An invoice that contains an invoice line (BG-25) where the invoiced item VAT category code (BT-151) is "Exempt from VAT" shall contain the seller VAT Identifier (BT-31), the seller Tax registration identifier (BT-32) and/or the seller tax representative VAT identifier (BT-63).</p> <p>An invoice that contains an invoice line (BG-25) where the sales tax category (BT-151) "Exempt from VAT" (E), a VAT number supplier (BT-31), tax number supplier (BT-32) and/or have a tax representative number (BT63).</p>
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Id	Description
BR-E-5	<p>In an Invoice line (BG-25) where the invoiced item VAT category code (BT-151) is "Exempt from VAT", the invoiced item VAT rate (BT-152) shall be 0 (zero).</p> <p>In an invoice line (BG-25) where the VAT category (BT-151) "Exempt from VAT" (E), the VAT percentage (BT-152) is zero.</p>
BR-E-6	<p>In a document level allowance (BG-20) where the document level allowance VAT category code (BT-95) is "Exempt from VAT", the document level allowance VAT rate (BT-96) shall be 0 (zero).</p> <p>In a Discount At the document level (BG-20) where the VAT category (BT-95) "Exempt from VAT" (E), the VAT percentage (BT-96) is zero.</p>
BR-E-7	<p>In a document level charge (BG-21) where the document level charge VAT category code (BT-102) is "EXEMPT from VAT", the Document level charge VAT rate (BT-103) shall be 0 (zero).</p> <p>In a supplement at document level (BG-21) Where the VAT category (BT-102) "Exempt from VAT" (E), the VAT percentage (BT-103) is zero.</p>
BR-E-8	<p>In a VAT breakdown (BG-23) Where the VAT category code (BT-118) is "Exempt from VAT" The VAT Category Taxable amount (BT-116) shall equal the sum of Invoice line net amounts (BT-131) minus the sum of Document level allowance amounts (BT-92) plus the sum of Document level charge Amounts (BT-99) where the VAT category codes (BT151, BT-95, BT-102) are "Exempt from VAT".</p> <p>In a VAT calculation (BG-23) Where the VAT category (BT-118) "Exempt from VAT" (E), the VAT Base amount (BT-116) is equal to the Sum of the NET line amounts (excl. VAT) (BT-131) minus the sum of the rebate amounts (BT-92) plus the sum of the surcharge amounts (BT-99) where the VAT categories (BT-151, BT-95, BT102) "Exempt from VAT" (E).</p>
BR-E-9	<p>The VAT Category Tax amount (BT-117) In A VAT breakdown (BG-23) Where the VAT category code (BT-118) equals "Exempt from VAT" shall equal 0 (zero).</p> <p>The VAT amount (BT-117) in a sales tax calculation (BG-23) Where the VAT category (BT118) "Exempt from VAT" (E) is must be zero.</p>
BR-E-10	<p>A VAT Breakdown (BG-23) with VAT Category code (BT-118) "Exempt from VAT" shall have a VAT exemption reason code (BT-121) or a VAT exemption reason text (BT-120).</p>

Id	Description
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The VAT calculation (BG-23)T "Exempt from VAT" (E) as a VAT category (BT-118) may not have a reason for VAT exemption, coded (BT-121) or reason for VAT exemption (BT-120).

#### 8.4.3.3.7 VAT Not applicable

If the sales tax does not apply to a delivery, the entire invoice is (Directive 2006/112/EC, article 16, second paragraph). In Ireland, however, no distinction is made between "not applicable" and "VAT exempt". The code for "VAT Not Applicable" ("O") is therefore not used for Irish invoices. The code can be used on foreign invoices and the following business rules apply:

**Table 33 — Business rules - VAT Not applicable**

Id	Description
BR-O-1	An invoice that contains an invoice line (BG-25), a document level allowance (BG-20) or a document level charge (BG-21) where the VAT category code (BT-151, BT-95 or BT-102) Is "Not subject to VAT" shall contain exactly one VAT breakdown group (BG-23) with the VAT category code (BT-118) equal to "Not Subject to VAT".
BR-O-2	An invoice that contains an invoice line (BG-25) where the invoiced item VAT category code (BT-151) is "not subject to VAT" shall not contain the seller VAT identifier (BT-31), the seller tax representative VAT identifier (BT-63) or the Buyer VAT identifier (BT-48).
BR-O-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "not subject to VAT" shall not contain the seller VAT identifier (BT-31), the seller tax representative VAT identifier (BT-63) or the Buyer VAT identifier (BT-48).

Id	Description
BR-O-5	An Invoice line (BG-25) where the VAT category code (BT-151) is "not subject to VAT" should not contain an invoiced item VAT rate (BT-152). In an invoice line (BG-25) Where the VAT category (BT-151) "VAT Not applicable" (O), has no VAT rate (BT-152).

BR-O-8	In a VAT breakdown (BG-23) Where the VAT category code (BT-118) is "Not subject to VAT" The VAT Category Taxable amount (BT-116) shall equal the sum of Invoice line net amounts (BT-131) minus the sum of document level allowance amounts (BT-92) plus the sum of document level charge amounts (BT-99) where the VAT category codes (BT-151, BT-95, BT-102) are "Not subject to VAT".
BR-O-9	The VAT Category Tax amount (BT-117) In a VAT breakdown (BG-23) Where the VAT category code (BT-118) is "Not subject to VAT" shall be 0 (zero).
BR-O-10	A VAT Breakdown (BG-23) with VAT Category code (BT-118) "Not Subject to VAT" shall a VAT exemption reason text (BT-120) "Not subject to VAT" (or the equivalent standard text in another language).
BR-O-11	An Invoice that contains a VAT breakdown group (BG-23) with a VAT category code (BT118) "Not subject to VAT" shall not contain other VAT breakdown groups (BG-23).
BR-O-12	An Invoice that contains a VAT breakdown group (BG-23) with a VAT category code (BT118) "Not subject to VAT" should not contain an Invoice line (BG-25) where the invoiced Item VAT category code (BT-151) is not "not subject to VAT".

Id	Description
BR-O-13	An Invoice that contains a VAT breakdown group (BG-23) with a VAT category code (BT118) "Not subject to VAT" shall not contain document level allowances (BG-20) where document level allowance VAT category code (BT-95) is not "not subject to VAT".
BR-O-14	An Invoice that contains a VAT breakdown group (BG-23) with a VAT category code (BT118) "not subject to VAT" shall not contain document level charges (BG-21) where document level charge VAT category code (BT-102) is not "not subject to VAT".

## 7.5 Semantic data types

### 7.5.1 Introduction

The elements of the invoice are represented in semantic data types. Semantic data types are defined in ISO 15000-5:2014, Annex B. They consist of a content and zero or more additional data elements (attributes). Content and additional elements are of a so-called primitive type.

In the CIUS, a recommended maximum length is defined for a number of data. Receivers Dlenen to make their systems suitable for at least that maximum length. Senders can assume that elements that fall within that maximum can be processed without problems. **Table 35 — Primitive types**

Primitive type	Definition
Binary	Series of binary characters.
Date	Calendar Day.
Decimal	A subset of the real numbers, represented as a decimal number.
String	A finite sequence of characters.

### 7.5.2 Amount. Type (Amounts)

An amount represents a monetary value. The currency is specified in another element.

The and 16931\_ Amount. Type<sup>4</sup> is based on the Amount. Type as defined in ISO 15000-5:2014, Annex B. and 16931\_ Amount. Type has up to two DeclImporters. Receivers of invoices must be able to handle a minimum length of 25 positions for amounts. Shippers should be aware that amounts longer than 25 positions are not properly processed. **Table 36 — Data type Amount. Type**

CoMponent	Use	Primitive Type	Example
Content	Mandatory	Decimal	10000.25

### 7.5.3 Unit Price Amount. Type (Prices)

Prices are amounts that can be multiplied by a number to calculate a line amount. The currency is specified in another element. The and 16931\_ Unit Price\_ Amount. Type is based on the Amount. Type as defined in ISO 15000 5:2014, Annex B. Receivers of invoices must have a minimum length of 25 positions for pricesUnnen processing. Shippers should be aware that prices are not properly processed for more than 25 positions. Prices do not have a restriction on the number of decimal places.

**Table 37 — Data type Unit price amount. Type**

Component	Use	PrimitClark Type	Example
Content	Mandatory	Decimal	10000.1234

### 7.5.4 Quantity. Type (quantities)

Quantities are expressed in units of product. The unit of code is in a separate data element. The and 16931\_ quantity. Type is based on the Quantity. Type as defined in ISO 15000-5:2014, Annex B. Receivers

<sup>4</sup> Dictionary EntrY Name as defined in ISO 15000-5:2014

of invoices must be able to handle a minimum length of 25 positions for quantities. Shippers should note that quantities longer than 25 positions and processed properly. Quantities do not have a restriction on the number of decimal places.

**Table 38 — DataType-Quantity. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Decimal	10000.1234

**7.5.5 Percentage. Type (percentages)**

Percentages are fractions of one hundred (per cent), for example the value 34.78% is shown as a percentage as 34.78. The and 16931\_ Percentage\_ Numeric. Type is based on the Numeric. Type as defined in ISO 15000-5:2014, Annex B. Receivers Invoices must be able to handle a minimum length of 10 positions for percentages. Shippers should take into account that percentages longer than 10 positions are not properly processed. Percentages do not have a restriction on the number of DEcimalen.

**Table 39 — DataType Percentage. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Decimal	34.7812

**7.5.6 Identifier. Type (identification numbers)**

Identification numbers of documents, parties or objects are issued by the author of the document or by a third party. An identification number specifies which identification scheme is used, in the data model or in the individual FACTuur. In A single case, the version of that schema can also be identified. The and 16931\_ Identifier. Type is based on the Identifier. Type as defined in ISO 15000-5:2014, Annex B. The identification scheme and possibly. The schema version indicates the SCHEMA on which the identification number is based.

Receivers of invoices must be able to handle a minimum length of 50 positions for identification numbers. Shippers should note that identification numbers longer than 50 poslties not be processed properly. Exception are the electronic addresses of supplier and customer (BT-34 and BT-49). These should contain 200 positions.

The use of the attributes is specified in the data model.

**Table 40— DataType Identifier. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	String	ABC: 123-DEF
Scheme identifier	Conditional	String	GLN
Scheme version Identifier	Conditional	String	1.0

**7.5.7 Document Reference. Type (Document references)**

Document references are identification numbers that are assigned to documents by vendors, customers, or third parties in order to refer to them. The and 16931\_ Document Reference\_ Identifier. Type is based on the Identifier. Type as defined in ISO 15000-5:2014, Annex B.

Recipients of invoices should be able to process a minimum length of 50 positions for references. Shippers should note that references exceeding 50 positions do not properlyKt.

**Table 41 — Data type Document Reference. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	String	ABC: 123-DEF

### 7.5.8 Code. Type (Codes)

Codes are used when a limited list values for an element are allowed and for indicating a limited number of options. Each code has a standardized meaning that must be interpreted by the recipient. De EN 16931\_ Code. Type is based on the Code. Type as defined in ISO 15000-5:2014, Annex B.

Receivers of invoices must be able to process a minimum length of 10 positions for codes. Senders should be aware that codes are longer than 10 positions are not processed properly.

The data model defines which code list is used for which code. The latest published version of the relevant code list applies..

**Table 42 — DataType Code. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	String	Abc123

### 7.5.9 Date. Type (dates)

Dates must meet the "Calendar Date Complete representation" As specified in ISO 8601 (see ISO 8601:2004, 5.2.1.1). Dates do not contain a time indicator. The EN 16931\_ Date\_ Date Time. Type is based on Date Time. Type as defined in ISO 15000-5:2014, Annex B. In XML, the date is represented as CCYY-MM-DD.

**Table 43 — DataType date. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Date	2015-06-10

### 7.5.10 Text. Type (text)

Text is the representation of something that is written or printed. The and 16931\_ Text. Type is based on the Text. Type as defined in ISO 15000-5:2014, Annex B. Texts may contain line breaks.

Recipients of invoices should be able to process a minimum length of 100 positions for text elements. Senders should take into account that text elements do not exceed 100 positions Be processed properly, with the following exceptions:

Reference customer (BT-10) and G/L account purchaser (BT-19) only need to hold 50 positions.

Postal codes (BT-38, BT-53, BT-67 and BT-78) have only 25 positions to hold.

FactuRnotitie (BT-22), Product name (BT-153) and Product description (BT-154) must be able to contain 200 positions.

**Table 44 — DataType-Text. Type**

Component	Use	Primitive Type	Example
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Content	Mandatory	String	"5% allowance when paid within 30 days"
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### 7.5.11 Binary Object. Type (Binary objects)

Binary objects are used to send Factuurondersteunende documents in the invoice.

The and 16931\_ Binary Object. Type is based on the Binary Object. Type as defined in ISO 15000-5:2014, Annex B. and 16931\_ Binary Object. Type has two supplementary components: a MIME Code, which specifies the MIME type of the document and the file name of the document.

**Table 45 — DataType- Binary Object. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Binary	
Mime Code	Mandatory	String	"Image/jpeg"
Filename	Mandatory	String	"Drawing5. jpg"

Receivers of invoices must be able to receive and process documents with the following MIME types (commonly used file extensions that belong to the MIME types in parentheses):

- application/PDF (. pdf);
- Image/PNG (. png);
- Image/jpeg (. jpg);
- Text/CSV (. csv);

A maximum of 10 documents with the invoice may be sent with a total size of up to 10 megabytes.

## Annex A – sample UBL invoice

```
<Invoice xmlns:cac="urn:oasis:names:specification:ubl:schema:xsd:CommonAggregateComponents-2"
  xmlns:cbc="urn:oasis:names:specification:ubl:schema:xsd:CommonBasicComponents-2"
  xmlns="urn:oasis:names:specification:ubl:schema:xsd:Invoice-2">
```

```
  <cbc:CustomizationID>urn:www.cenbii.eu:transaction:biitrns010:ver2.0:extended:urn:www.peppol.eu:bis:pep
  pol4a:ver2.0</cbc:CustomizationID>
  <cbc:ProfileID>urn:www.cenbii.eu:profile:bii04:ver2.0</cbc:ProfileID>
  <cbc:ID>123abc</cbc:ID>
  <cbc:IssueDate>2018-04-16</cbc:IssueDate>
  <cbc:DueDate>2018-04-13</cbc:DueDate>
  <cbc:InvoiceTypeCode listAgencyID="6" listID="UNCL1001">380</cbc:InvoiceTypeCode>
  <cbc:Note>Main Avenue Street Lights</cbc:Note>
  <cbc:DocumentCurrencyCode listID="ISO4217">EUR</cbc:DocumentCurrencyCode>
  <cbc:AccountingCost>10016631346</cbc:AccountingCost>
  <cac:InvoicePeriod>
    <cbc:StartDate>2018-03-01</cbc:StartDate>
    <cbc:EndDate>2018-04-13</cbc:EndDate>
```

```

</cac:InvoicePeriod>
<cac:AdditionalDocumentReference>
  <cbc:ID>PDF1.PDF</cbc:ID>
  <cbc:DocumentType>Commercial Invoice</cbc:DocumentType>
  <cac:Attachment>
    <cbc:EmbeddedDocumentBinaryObject filename="PDF1.PDF"
mimeCode="application/pdf">redacted</cbc:EmbeddedDocumentBinaryObject>
  </cac:Attachment>
</cac:AdditionalDocumentReference>
<cac:AccountingSupplierParty>
  <cac:Party>
    <cbc:EndpointID schemeID="IE:VAT">9935:IE123456789</cbc:EndpointID>
    <cac:PartyIdentification>
      <cbc:ID schemeID="0001">IE123456789</cbc:ID>
    </cac:PartyIdentification>
    <cac:PartyName>
      <cbc:Name>Acme Electricity Supply</cbc:Name>
    </cac:PartyName>
    <cac:PostalAddress>
      <cbc:StreetName>A Street</cbc:StreetName>
      <cbc:AdditionalStreetName>Acme Business Park</cbc:AdditionalStreetName>
      <cbc:CityName>Dublin</cbc:CityName>
      <cbc:PostalZone>0000</cbc:PostalZone>
      <cac:Country>
        <cbc:IdentificationCode listID="ISO3166-
1:Alpha2">IE</cbc:IdentificationCode>
      </cac:Country>
    </cac:PostalAddress>
    <cac:PartyTaxScheme>
      <cbc:CompanyID schemeID="IE:VAT">IE123456789</cbc:CompanyID>
      <cac:TaxScheme>
        <cbc:ID>VAT</cbc:ID>
      </cac:TaxScheme>
    </cac:PartyTaxScheme>
    <cac:PartyLegalEntity>
      <cbc:RegistrationName>Acme Electricity Limited</cbc:RegistrationName>
      <cbc:CompanyID>56789</cbc:CompanyID>
    </cac:PartyLegalEntity>
  </cac:Party>
</cac:AccountingSupplierParty>
<cac:AccountingCustomerParty>
  <cac:Party>
    <cbc:EndpointID schemeID="0088">123456789012</cbc:EndpointID>
    <cac:PartyIdentification>
      <cbc:ID schemeID="GLN">123456789012</cbc:ID>
    </cac:PartyIdentification>
    <cac:PartyName>
      <cbc:Name>redacted</cbc:Name>
    </cac:PartyName>
    <cac:PostalAddress>
      <cbc:StreetName>Main Street</cbc:StreetName>
      <cbc:AdditionalStreetName>Building 2</cbc:AdditionalStreetName>
      <cbc:CityName>Dublin</cbc:CityName>
      <cbc:PostalZone>00000</cbc:PostalZone>
      <cac:Country>
        <cbc:IdentificationCode listID="ISO3166-
1:Alpha2">IE</cbc:IdentificationCode>
      </cac:Country>
    </cac:PostalAddress>

```

```

        <cbc:PartyLegalEntity>
            <cbc:RegistrationName>redacted</cbc:RegistrationName>
            <cbc:CompanyID>123456</cbc:CompanyID>
        </cbc:PartyLegalEntity>
    </cac:Party>
</cac:AccountingCustomerParty>
<cac:TaxTotal>
    <cbc:TaxAmount currencyID="EUR">42.90</cbc:TaxAmount>
    <cac:TaxSubtotal>
        <cbc:TaxableAmount currencyID="EUR">317.90</cbc:TaxableAmount>
        <cbc:TaxAmount currencyID="EUR">42.90</cbc:TaxAmount>
        <cac:TaxCategory>
            <cbc:ID schemeID="UNCL5305">S</cbc:ID>
            <cbc:Percent>13.5</cbc:Percent>
            <cac:TaxScheme>
                <cbc:ID>VAT</cbc:ID>
            </cac:TaxScheme>
        </cac:TaxCategory>
    </cac:TaxSubtotal>
</cac:TaxTotal>
<cac:LegalMonetaryTotal>
    <cbc:LineExtensionAmount currencyID="EUR">317.90</cbc:LineExtensionAmount>
    <cbc:TaxExclusiveAmount currencyID="EUR">317.90</cbc:TaxExclusiveAmount>
    <cbc:TaxInclusiveAmount currencyID="EUR">360.80</cbc:TaxInclusiveAmount>
    <cbc:AllowanceTotalAmount currencyID="EUR">0.00</cbc:AllowanceTotalAmount>
    <cbc:ChargeTotalAmount currencyID="EUR">0.00</cbc:ChargeTotalAmount>
    <cbc:PrepaidAmount currencyID="EUR">0.00</cbc:PrepaidAmount>
    <cbc:PayableAmount currencyID="EUR">360.80</cbc:PayableAmount>
</cac:LegalMonetaryTotal>
<cac:InvoiceLine>
    <cbc:ID>1</cbc:ID>
    <cbc:InvoicedQuantity unitCode="EA" unitCodeListID="UNECERec20">1</cbc:InvoicedQuantity>
    <cbc:LineExtensionAmount currencyID="EUR">317.9</cbc:LineExtensionAmount>
    <cac:Item>
        <cbc:Name>Electricity charges</cbc:Name>
        <cac:ClassifiedTaxCategory>
            <cbc:ID schemeID="UNCL5305">S</cbc:ID>
            <cbc:Percent>13.5</cbc:Percent>
            <cac:TaxScheme>
                <cbc:ID>VAT</cbc:ID>
            </cac:TaxScheme>
        </cac:ClassifiedTaxCategory>

        <cac:AdditionalItemProperty>
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            <cbc:Value>25</cbc:Value>
        </cac:AdditionalItemProperty>
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            <cbc:Name>HIGHEST_ACTUAL_MIC_LEVEL_(KW)</cbc:Name>
            <cbc:Value/>
        </cac:AdditionalItemProperty>
        <cac:AdditionalItemProperty>
            <cbc:Name>KWH_DAY_1</cbc:Name>
            <cbc:Value>6</cbc:Value>
        </cac:AdditionalItemProperty>
        <cac:AdditionalItemProperty>
            <cbc:Name>KWH_NIGHT_2</cbc:Name>
            <cbc:Value>4523</cbc:Value>
        </cac:AdditionalItemProperty>
    </cac:Item>
</cac:InvoiceLine>

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        <cbc:Name>TOTAL_KWH</cbc:Name>
        <cbc:Value>4529</cbc:Value>
    </cac:AdditionalItemProperty>
</cac:Item>
<cac:Price>
    <cbc:PriceAmount currencyID="EUR">317.9</cbc:PriceAmount>
</cac:Price>
</cac:InvoiceLine>
</Invoice>
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