

E-ARVELDUS. OSA 1: E-ARVE PÕHIELEMENTIDE  
SEMANTILINE ANDMEMUDEL

Electronic invoicing - Part 1: Semantic data model of the  
core elements of an electronic invoice

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 16931-1:2017+A1:2019 sisaldab Euroopa standardi EN 16931-1:2017+A1:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 16931-1:2017+A1:2019 consists of the English text of the European standard EN 16931-1:2017+A1:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.11.2019.	Date of Availability of the European standard is 13.11.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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EUROPEAN STANDARD

**EN 16931-1:2017+A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2019

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ICS 35.240.20; 35.240.63

English Version

## Electronic invoicing - Part 1: Semantic data model of the core elements of an electronic invoice

Facturation électronique - Partie 1 : Modèle  
sémantique de données des éléments essentiels d'une  
facture électronique

Elektronische Rechnungsstellung - Teil 1:  
Semantisches Datenmodell der Kernelemente einer  
elektronischen Rechnung

This European Standard was approved by CEN on 17 April 2017 and includes Amendment 1 approved by CEN on 25 September 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 16931-1:2017+A1:2019) has been prepared by Technical Committee CEN/TC “Electronic Invoicing”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document includes Corrigendum 1 issued by CEN on 2019-11-13 and Amendment 1, approved by CEN on 2019-9-25.

This document supersedes A1 EN 16931-1:2017 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags AC AC.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2014/55/EU [1].

For relationship with EU Directive 2014/55/EU [1], see informative Annex B, which is an integral part of this document.

A1 Attention is drawn to the existence of deviations from the content of the EN due to national regulation. See annex E for all relevant information concerning them. A1

This document is part of a set of documents, consisting of:

- EN 16931-1:2017 Electronic invoicing - Part 1: Semantic data model of the core elements of an electronic invoice
- CEN/TS 16931-2:2017 Electronic invoicing - Part 2: List of syntaxes that comply with EN 16931-1
- CEN/TS 16931-3-1:2017 Electronic invoicing - Part 3-1: Methodology for syntax bindings of the core elements of an electronic invoice
- CEN/TS 16931-3-2:2017 Electronic invoicing - Part 3-2: Syntax binding for ISO/IEC 19845 (UBL 2.1) invoice and credit note

- CEN/TS 16931-3-3:2017 Electronic invoicing - Part 3-3: Syntax binding for UN/CEFACT XML Cross Industry Invoice D16B
- CEN/TS 16931-3-4:2017 Electronic invoicing - Part 3-4: Syntax binding for UN/EDIFACT INVOIC D16B
- CEN/TR 16931-4:2017 Electronic invoicing - Part 4: Guidelines on interoperability of electronic invoices at the transmission level
- CEN/TR 16931-5:2017 Electronic invoicing - Part 5: Guidelines on the use of sector or country extensions in conjunction with EN 16931-1, methodology to be applied in the real environment
- CEN/TR 16931-6<sup>1</sup> Electronic invoicing - Part 6: Result of the test of EN 16931-1 with respect to its practical application for an end user - Testing methodology

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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<sup>1</sup> In preparation.

## Introduction

The European Commission estimates that “The mass adoption of e-invoicing within the EU would lead to significant economic benefits and it is estimated that moving from paper to e-invoices will generate savings of around EUR 240 billion over a six-year period”<sup>2</sup>. Based on this recognition “The Commission wants to see e-invoicing become the predominant method of invoicing by 2020 in Europe.”

To achieve this goal, Directive 2014/55/EU [1] on electronic invoicing in public procurement aims at facilitating the use of electronic invoices by economic operators when supplying goods, works and services to the public administration. The Directive sets out the legal framework for the establishment and use of a European Standard (EN) for the semantic data model of the core elements of an electronic invoice.

The semantic data model of the core elements of an electronic invoice – the core invoice model – as described in this document is based on the proposition that a quite limited, but sufficient set of information elements can be defined that supports generally applicable invoice-related functionalities. These functionalities are described in Clause 5. The core invoice model, as described in Clause 6, contains information elements that are commonly used and accepted including those that are legally required.

It is expected that in most situations, business partners would use the core invoice model exclusively and the invoices they send or receive would not contain any additional structured information elements. However, in some sectors or situations where there are specific information requirements, the required information may be conveyed in the form of unstructured text. Unstructured text has the drawback in that it cannot be processed automatically and therefore requires human intervention. Alternatively, the specific information requirements can be implemented using information elements that extend the core invoice model. Any such extension needs to respect the semantic definitions in the core invoice model. Only business partners that are part of such a sector or supply chain would be expected to be able to process the extensions. In these circumstances, it should be possible to define a number of required additional information elements whilst still utilizing the core invoice model concept.

In line with Directive 2014/55/EU [1] and after the publication of the reference to this document in the Official Journal of the European Union, all contracting authorities and contracting entities in the EU will be obliged to be able to receive and process an e-invoice as long as it contains all of the (applicable) core elements of an invoice defined in this European Standard (and provided that it is represented in any of the syntaxes identified in the related Technical Specification CEN/TS 16931-2 “List of syntaxes that comply with EN 16931-1” in accordance with the request referred to in paragraph 1 of article 3 of the Directive 2014/55/EU. The inclusion of any additional information which is not contained in the core model will be at the sender’s discretion and contained in unstructured text or in an extension, by agreement with the contracting entity. The inclusion of any extension in an e-invoice will be optional, and it will not form an integral part of the European Standard. See Clause 4 below for further detail on extensions.

By ensuring semantic interoperability of electronic invoices, the European Standard and its ancillary European standardization deliverables will serve to remove market barriers and

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<sup>2</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0712:FIN:en:PDF>.

obstacles to trade deriving from the existence of various national rules and standards – and thus contribute to the goals set by the European Commission.

## 1 Scope

This European Standard establishes a semantic data model of the core elements of an electronic invoice. The semantic model includes only the essential information elements that an electronic invoice needs to ensure legal (including fiscal) compliance and to enable interoperability for cross-border, cross sector and for domestic trade. The semantic model may be used by organizations in the private and the public sector for public procurement invoicing. It may also be used for invoicing between private sector enterprises. It has not been specifically designed for invoicing consumers.

This European Standard complies at least with the following criteria:

- it is technologically neutral;
- it is compatible with relevant international standards on electronic invoicing;
- the application of this standard should comply with the requirements for the protection of personal data of Directive 95/46/EC, having due regard to the principles of privacy and data protection by-design, data minimization, purpose limitation, necessity and proportionality;
- it is consistent with the relevant provisions of Directive 2006/112/EC [2];
- it allows for the establishment of practical, user-friendly, flexible and cost-efficient electronic invoicing systems;
- it takes into account the special needs of small and medium-sized enterprises as well as of sub-central contracting authorities and contracting entities;
- it is suitable for use in commercial transactions between enterprises.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 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*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE Business terms that are part of the semantic model are defined in the model itself.

#### 3.1

##### **electronic invoice**

invoice that has been issued, transmitted and received in a structured electronic format which allows for its automatic and electronic processing

[SOURCE: Directive 2014/55/EU [1]]

#### 3.2

##### **semantic data model**

structured set of logically interrelated information elements

#### 3.3

##### **information element**

semantic concept that can be defined independent of any particular representation in a syntax

#### 3.4

##### **structured information element**

information element that can be processed automatically

#### 3.5

##### **syntax**

machine-readable language or dialect used to represent the information elements contained in an electronic document (e.g. an electronic invoice)

#### 3.6

##### **business term**

label assigned to a given information element which is used as a primary reference

#### 3.7

##### **core invoice model**

semantic data model of the core elements of an electronic invoice

#### 3.8

##### **core elements of an electronic invoice**

set of essential information elements that an electronic invoice may contain in order to enable cross-border interoperability, including the necessary information to ensure legal compliance

#### 3.9

##### **identifier**

character string used to establish the identity of, and distinguish uniquely, one instance of an object within an identification scheme from all other objects within the same scheme

Note 1 to entry: An identifier may be a word, number, letter, symbol, or any combination of those, depending on the identification scheme used.

**3.10****identification scheme**

collection of identifiers applicable for a given type of object governed under a common set of rules

**3.11****compliant**

some or all features of the core invoice model are used and all rules of the core invoice model are respected

Note 1 to entry: Based on TOGAF definition of a compliant specification [18].

**3.12****conformant**

all rules of the core invoice model are respected and some additional features not defined in the core invoice model are also used

Note 1 to entry: Based on TOGAF definition of a conformant specification [18].

**4 The concept of a core invoice****4.1 The core invoice model as a response to the challenge of interoperability**

The establishment of interoperability of business information systems with respect to the exchange of electronic documents such as invoices is viewed by many as a major challenge for the following reasons:

- a) the overall business environment is very diverse and consequently so is the information that needs to be exchanged between business partners;
- b) documents such as invoices consist of many information elements; attempting to define and standardize all occurring information elements would generate a very large and complex information model that no single organization could implement entirely;
- c) even if a complete implementation of such a large model were possible, its implementation across the business environment would be very challenging and costly;
- d) as experience shows, business partners in various industry sectors will agree on subsets of the model that are supported by their business information systems. Such variety would work against the principles of using common standards, jeopardize interoperability and result in expensive implementation projects.

This document is based on a different approach. In contrast to collecting and meeting the requirements of all businesses, a semantic model is defined that includes only the essential information elements that an electronic invoice needs to ensure legal (including fiscal) compliance and to enable interoperability for cross-border, cross-sector and domestic trade. The semantic model may be used by public and private sector organizations for public procurement invoicing. It may also be used for invoicing between private sector enterprises.

The result of this approach is a semantic model of core information elements for an electronic invoice, i.e. a core invoice model. The following guiding principles form the basis of the core invoice model:

- 1) it should be easier to prepare and send, as well as to receive and process electronic invoices when compared to paper invoices;
- 2) the use of standardized information elements should make electronic invoice processing more efficient than processing paper invoices;
- 3) compliance with the core invoice model should mean that business partners should be able to interpret and understand the content of an electronic invoice at the semantic level without prior consultation or bilateral agreements;
- 4) invoices should be composed of structured information elements to enable efficient and automatic processing;
- 5) invoice processing software should be able to present all information elements in the core invoice model, and automatically process all structured data;
- 6) the use of structured data should result in optimized business processes;
- 7) the core invoice model makes no assumption about the method by which an invoice is created, delivered and processed. It may be exchanged directly between business partners or exchanged using an intermediary service provider;
- 8) the core invoice model makes no assumption about the syntax or transmission technology used. Senders and receivers of e-invoices shall ensure the authenticity and integrity of the invoice according to relevant regulations. Mapping to several syntaxes is provided in CEN/TS 16931-3 from subpart 2 onward.

#### **4.2 Contents of the core invoice model**

The core invoice model is based on the proposition that a quite limited, but nevertheless consists of a sufficient set of information elements which can be defined and support generally applicable invoice-related functionalities. These functionalities include invoice issuance and delivery, invoice validation, accounting, VAT reporting, payment and auditing. The core invoice model contains information elements that are commonly used and accepted, including those that are legally required.

If all organisations in Europe were to implement the core invoice model in their business information systems using the specified information elements, then sending, receiving and processing invoices electronically, without human intervention, would be possible. There would be no need for onerous pre-negotiated bilateral agreements between organizations on the actual semantic content of the invoice and its exchange. The only assumption is the existence of a normal business contract or trading agreement. The core invoice model supports a set of invoice functions, as specified in Clause 5 below.

The set of information elements that are contained in the core invoice model is commonly considered to consist of two parts: a legal part and a common part.

The legal part of the core invoice model supports the observance of both tax and commercial legal and regulatory requirements pertaining to electronic invoicing commonly in force throughout the EU.

The common part contains commonly used and accepted information elements that are not sector or country specific.

A specific information element may be correctly allocated to one or both parts. Therefore categorizing elements with respect to these parts in the semantic model is not considered to be meaningful.

To fulfil the requirements above, judgment has had to be made on the selection of the information elements to be included in the core invoice model. First, for the legal part requirements, the selection has been made regarding the information elements required on a mandatory basis by EU VAT Directives and individual state law, whether local VAT regulations, or any other local legal provision (regulatory, contractual company law, laws on business documents, etc.). In some cases, those information elements that are exclusively confined to a single or very small number of countries and therefore fall outside the doctrine of 'commonly in force throughout the EU' have not been included in the core invoice model. Secondly, the elements selected to satisfy the requirements of the common part form a justifiable selection of requirements required in commercial practice.

An important criterion when to include an information element in the core invoice model that is above and beyond one that is legally required is whether it can be assumed that the buyer's information system can process (or otherwise handle) such an element. If the business information systems of most buyers are incapable of processing such an information element, that element should not be part of the core invoice model. If such an element is nevertheless required in a specific context, it should be contained within an extension to the core invoice model, either specific to a sector or country. The methodology to create extensions is described in CEN/TR 1693-5. When experience shows that an extension is frequently used, then such an extension could be added as information elements to the core invoice model in a later version rather than continuing to be handled in an extension.

### **4.3 How to use and extend the core invoice model**

As stated in the previous subclause, the core invoice model is intended to be used for all generally applicable invoicing processes. In most situations, business partners would use the core invoice model exclusively and the invoices they send or receive would contain only structured information elements defined in the model. Where a dedicated field exists for a business term or piece of data, this field shall be used for the information content instead of using a textual field.

There are however circumstances where the trading partners may wish to: Either 1. restrict the information elements to be used in an e-invoice or 2. to provide additional information elements. The first requirement is satisfied using a Core Invoice Usage Specification (CIUS). The second requirement is satisfied using an extension specified in an Extension Specification.

In many trading situations, it may be appropriate to restrict the use of conditional information elements present in the core invoice model in some way to support automated processing. The use of a CIUS to specify these requirements is described in Clause 7 below. The CIUS is a specification that provides a seller with detailed guidance, explanations and examples, relating to the actual implementation and use of the information elements in the core invoice model in a specific trading situation.

Typically, a CIUS will be created by a contracting entity (buyer) in relation to its own supply chain or by a group of contracting entities wishing to achieve consistency in the way that the information elements in the core invoice model are to be used by sellers trading with an identified sector or community of buyers. The requirements set out in such a CIUS will be communicated to sellers or placed on a website, and may be included in the contractual

documentation between the parties. Alternatively, a CIUS may be created by a group of sellers and agreed in turn by their buyer or buyers in the context of a specific industry or supply chain.

A CIUS is a set of usage guidelines or restrictions made to the core invoice model that will still produce an invoice instance that is fully compliant with the core invoice model set out in this document. That means that a receiver of an invoice document instance that has been created in compliance with a CIUS is still able to receive and process it in accordance with the rules defined for the core invoice model.

In some sectors or situations where there are specific additional information requirements, the required information may be conveyed in the form of unstructured text. Unstructured text has the drawback in that it cannot be processed automatically and therefore requires human intervention.

Alternatively, the specific information requirements can be implemented using an extension containing information elements that extend the core invoice model (See CEN/TR 16931-5 for the methodology applicable to the use of extensions). Any such extension shall not infringe or contradict the semantic definitions in the core invoice model. Only business partners that are part of such a sector or supply chain would be expected to be able to process the extensions. In these circumstances, it is possible to carefully define the required additional information elements, whilst still utilizing the core invoice model concept.

Some extensions are not specific to a single supply chain or industry sector, but may be specific to functions or business processes required by more than one sector. E.g. the vendor managed inventory (VMI) process has been implemented by, for example, the automotive, steel and printing industries. The VMI business process may require additional information elements, not present in the core invoice model. Clearly, similar functions and processes should consistently use the same information elements across Europe.

The development of sector specific or cross-sector extensions should be based on justified business requirements. These can only be gathered by industry experts, (private and public) sector organizations and their customers, who understand those requirements. The semantic model of these additional information elements will need to be defined and registered as an extension with the appropriate organization.

## **4.4 Compliance**

### **4.4.1 General**

Compliance to the core invoice model, can be measured at three levels:

- at the level of specifications;
- the actual implementation of a given sender or receiver; and
- the individual invoice instance documents.

Each of these levels is discussed in 4.4.2 to 4.4.4.

### **4.4.2 Compliance of the core invoice usage specifications**

The core invoice usage specifications that are used in conjunction with the core invoice model shall themselves comply to the methodology and rules described in this guideline and expressed in the following criteria:

- the specification shall clearly state what business functions and/or legal requirements it is intended to support;

- the specification shall clearly state its issuer and responsible 'governor';
- the specification shall clearly state in what way the requirements of the CIUS differ from the core invoice model, either by documenting the difference only or by specifically pointing out what the differences are;
- the resulting invoice document instance shall be fully compliant to the core invoice model.
- the specification and, when relevant, its version shall be uniquely identifiable both for referencing and for identification in processing;
- the specification shall state its underlying specifications (the core invoice model as well as other specifications that it may build upon);
- the syntax binding of a specification shall follow the syntax binding methodology defined in CEN/TS 16931-3-1.

#### **4.4.3 Compliance of sending or receiving party**

A receiving party may only claim compliance to the core invoice model if he accepts invoices that comply with the core invoice model in general, or with a CIUS, that is itself compliant with the core invoice model.

A sending party may claim compliance if he sends invoices that comply to the core invoice model, including those issued in accordance with a conformant CIUS.

#### **4.4.4 Compliance of an invoice document instance**

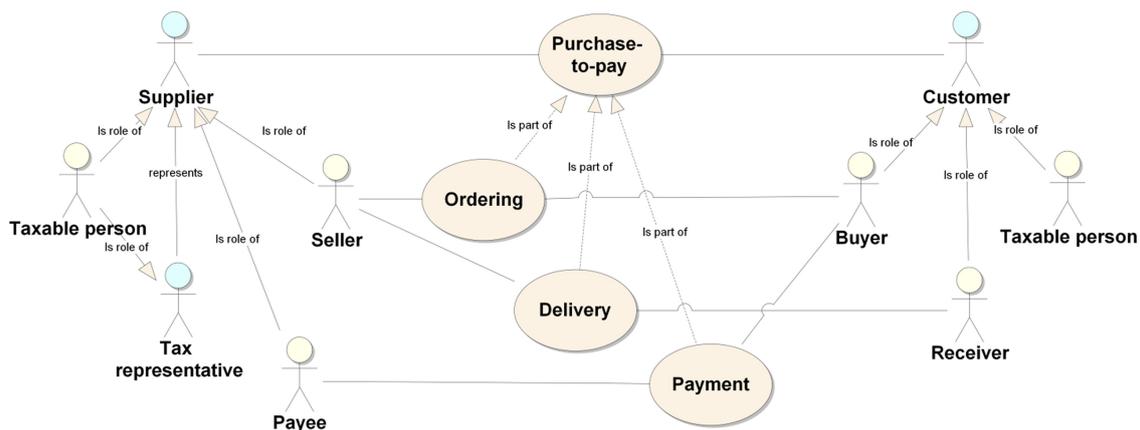
An invoice document instance is compliant to the core invoice model if it respects all rules defined for the core invoice model, which may include the specification contained in a conformant CIUS.

If an invoice instance document supports requirements that can be considered as a use of a CIUS, the invoice instance document is still compliant to the core invoice model. These invoice instance documents can still be received and processed by a party who is not supporting the CIUS because it still complies to the rules of the core invoice model.

## **5 Business processes and functionality supported by the core invoice**

### **5.1 The business parties involved and their roles and relationships**

In the basic purchase-to-pay process there are two business parties, the Customer and the Supplier. Each party may fulfil two or three roles in the process. The Customer party has the role of the Buyer (the commercial role that contracts with a Seller and orders the goods and services) and the Receiver (the operational role that receives the goods and services). The Supplier party has the role of the Seller (the commercial role that is contracted by a Buyer) and the Payee (the role that receives the payment). Both parties are considered to be Taxable persons (the role that declares and pays or reclaims VAT), except for some public entities. The Supplier may delegate the operational aspects of that role to a Tax representative, who declares and pays VAT on his behalf.



**Figure 1 — Parties and roles**

In the core invoice model, it is assumed that the Supplier party combines, by default, the roles of Seller and Payee. Roles may however be outsourced. The role of Payee may be fulfilled by another party, e.g. a factoring service. The same applies to the roles of the Customer (Buyer and Receiver) that may be fulfilled by different parties. It is assumed that the Seller issues the invoice. Note that in certain transactions the Buyer may be liable to pay VAT instead of the Seller.

An invoice consists of a header and one or more line items. All information about the parties is defined at header level.

Table 1 illustrates the different roles in an invoice:

**Table 1 — Parties and roles**

Context	Role	Explanation
<b>Supplier:</b>		
Trade	Seller (invoice issuer)	Principal role
Payment	Payee	Additional role, may be a different party from the Seller (e.g. a factoring service)
Tax	Taxable Person (may engage a Tax representative)	Designation for tax purposes
<b>Customer:</b>		
Trade	Buyer (invoice receiver)	Principal role
Delivery	Receiver	Additional role, may be a different party from the Buyer (e.g. a subsidiary of the Buyer in another location)
Tax	Taxable Person	Designation for tax purposes

Other parties may also play roles in the invoicing process, such as (e.g. transport) service providers and (e.g. tax) authorities. They are however indirectly involved as an agent or counterpart and not included in the table.

## 5.2 Business process requirements supported

### 5.2.1 Introduction

The core invoice model supports a basic purchase-to-pay process. Purchase-to-pay processes can be complex due to logistics, legal, product and technical requirements. Examples of such complex processes are: vendor managed inventory, invoicing on behalf of multiple parties in the same invoice, invoicing complex products or project-related products, or 'swap' deals. These processes are out of scope of the core invoice model. However, the core invoice model can be extended to support such processes. The extension methodology is described in CEN/TR 16931-5.

This subclause 5.2 describes the processes that are supported by the core invoice model. These processes include buying, selling, delivering goods and services and payment between Customers and Suppliers and their respective roles. How the invoice and other documents are electronically exchanged is not described in the process models. Parties may handle document exchange with their own resources or outsource (part of) it. See also CEN/TR 16931-4.

The process models focus on the external activities of the parties and do not describe internal activities. Only the activities of the roles listed in Table 1 are modelled, not those of third parties.

The process model diagrams are presented in the Business Process Model and Notation (BPMN) of the Object Management Group (OMG) [12]. A short legend of the symbols used can be found in Annex D.

The process models included in 5.2 are intended to indicate the business contexts that are supported by the core invoice model. The models do not give a full definition of those processes.

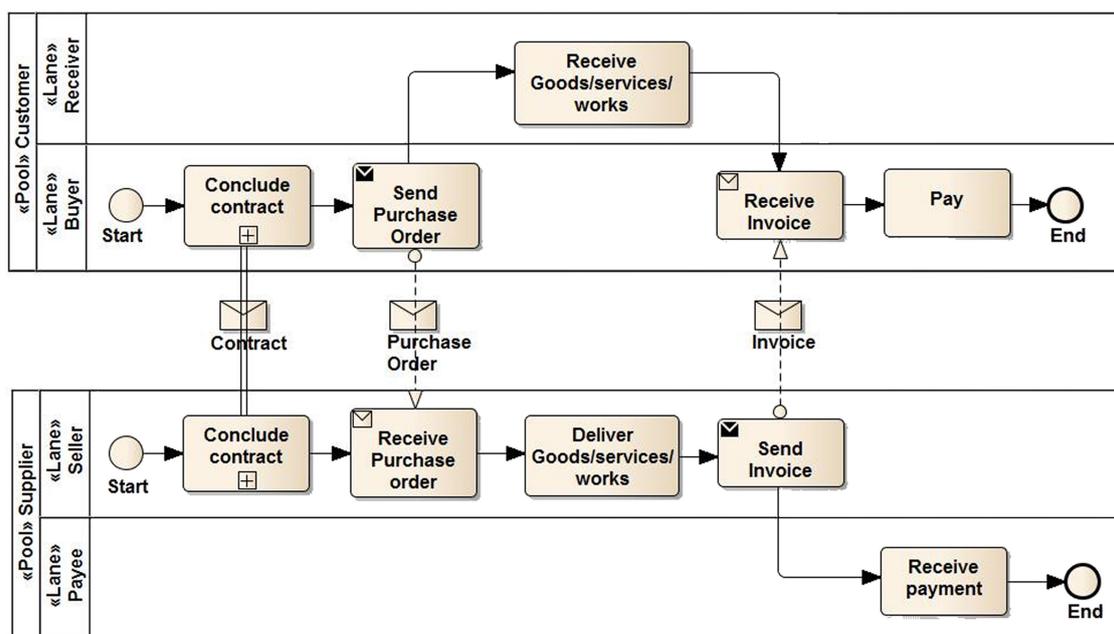
The core invoice model shall include elements that allow the trading parties to represent any invoice transaction according to the EU VAT directives and should support the following types of business processes:

- P1: Invoicing of deliveries of goods and services against purchase orders, based on a contract;
- P2: Invoicing deliveries of goods and services based on a contract;
- P3: Invoicing the delivery of an incidental purchase order;
- P4: Pre-payment;
- P5: Spot payment;
- P6: Payment in advance of delivery;
- P7: Invoices with references to a despatch advice;
- P8: Invoices with references to a despatch advice and a receiving advice;
- P9: Credit notes or invoices with negative amounts, issued for a variety of reasons including the return of empty packaging;
- P10: Corrective invoicing (cancellation/correction of an invoice);

- P11: Partial and final invoicing;
- P12: Self billing.

Other processes are not explicitly supported, but the core invoice model may still be applicable. In more complex or advanced processes, however, extensions to the information content of the core invoice model may be needed (see CEN/TR 16931-5).

### 5.2.2 Invoicing of deliveries against purchase orders, based on a contract (P1)



**Figure 2 — Invoicing of deliveries against purchase orders, based on a contract**

In this process the Buyer and the Seller conclude a formal contract (or there is an assumed contract by legal definition) in which the terms and conditions are stated under which goods and services will be delivered and are paid for. The Buyer orders the goods and services, stating the specifications for goods and services, the quantities and the place and time of delivery. The Seller delivers the ordered goods and services to the Receiver as specified on the purchase order. This delivery is then invoiced by the Seller to the Buyer. Finally, the Buyer pays the Payee.

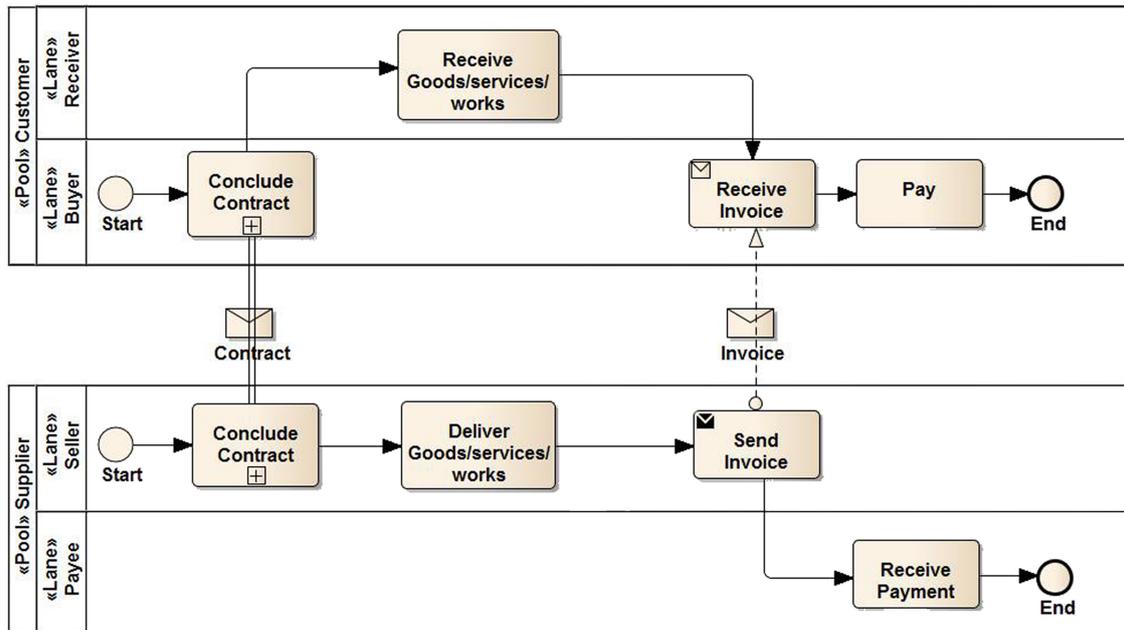
A purchase order is sent by the Buyer as a single document. Depending on the contract between the Seller and the Buyer the purchase order may be confirmed by the Seller or even be the subject of negotiation between Buyer and Seller (not shown in the diagram). The resulting purchase order then may result in one or more deliveries (e.g. regular monthly or periodic supply with multiple deliveries under one PO). Each delivery results in an invoice. An invoice may only refer to one delivery and one purchase order.

The delivery may include the pick-up and return of returnable packaging from previous deliveries and, for which a payment (deposit) had previously been made by the Buyer and had been received by the Seller. Depending on the agreement between the Seller and Buyer, this deposit may need to be reimbursed to the Buyer using the invoice to account for reimbursement. The invoice may therefore contain lines with a negative amount. Alternatively, credit notes may be used instead.

In a number of national and legal environments, descriptions of products, names and addresses of parties, and locations are obligatory in the electronic messages. Therefore, textual

representation of these objects is included in the core invoice model. In other jurisdictions, the Buyer and the Seller may agree on one or more identification schemes for products, locations, parties and other objects. These schemes remove the need for textual based descriptions and names and addresses of the objects identified. These schemes are usual agreed in advance of the Purchase to Pay process and there are various mechanism used for this. This process is called Master Data Synchronisation. In the core invoice model it is assumed that a Master Data Synchronisation process has not been implemented.

### 5.2.3 Periodic invoicing of deliveries based on a contract, where no purchase order is required (P2)



**Figure 3 — Periodic invoicing of deliveries based on a contract**

In this process the contract directly triggers the delivery. There is no requirement for a purchase order. This scenario is common in the delivery of utilities, but also in delivery of, e.g. food services to offices, schools and hospitals. Invoices are issued to cover a fixed period of time (which can be different per invoice line) and there are continuously instances of the goods and service being delivered. An invoice may only refer to one contract.

### 5.2.4 Invoicing the delivery against an incidental purchase order (P3)

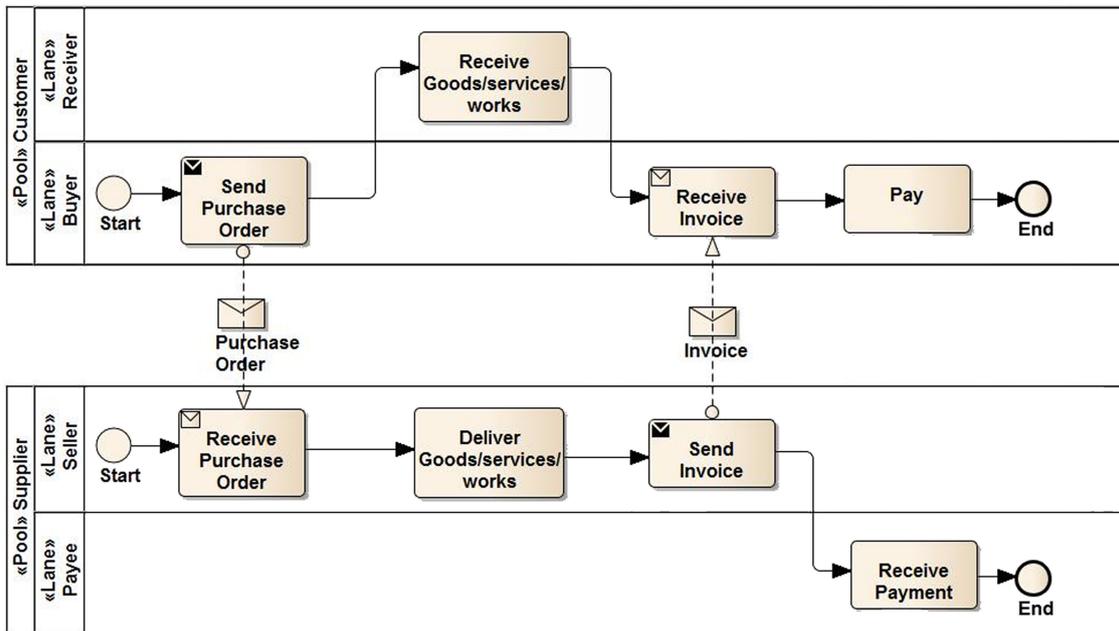


Figure 4 — Invoicing the delivery against an incidental purchase order

In this process, a separate contract does not exist. Purchase orders are placed over the telephone, using internet or over the counter. The purchase order serves as the contract and triggers the delivery. Each delivery results in an invoice. The purchase order may be confirmed by the Seller (not shown in the diagram).

### 5.2.5 Pre-payment (P4)

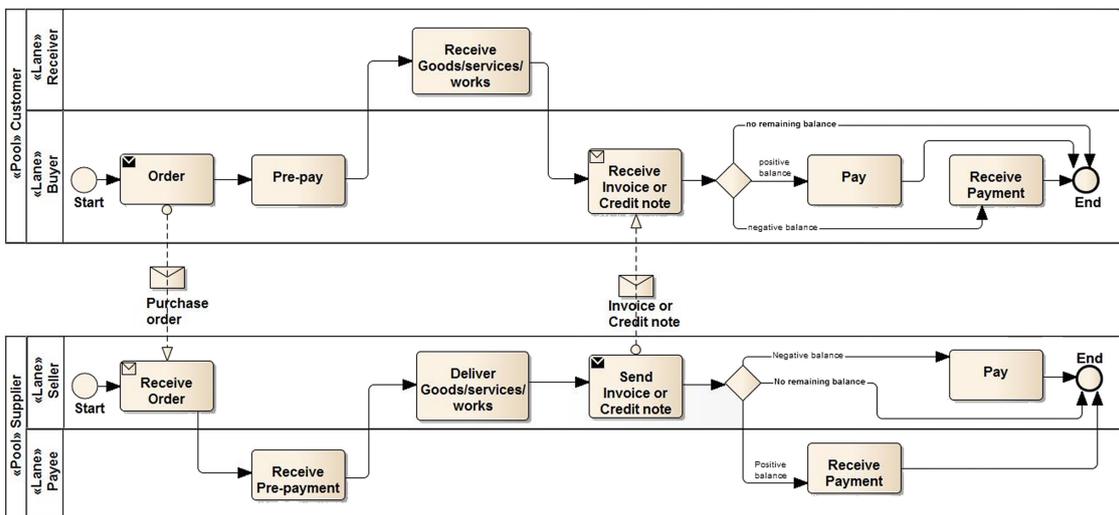


Figure 5 — Pre-payment

The Buyer orders goods and services. Full payment or part-payment is made in advance of the invoice. The invoice states the amount paid in advance and the amount now due for payment by deducting the amount paid in advance from the invoice total, i.e. the balance. If the balance is positive, there is still an amount of money outstanding to the Seller and a final payment is made.

If the balance is negative, an invoice with a negative amount due for payment is sent, or a credit note. The Seller then pays the balance to the Buyer. Each delivery results in an invoice. An invoice may only refer to one delivery and one purchase order.

### 5.2.6 Spot payment (P5)

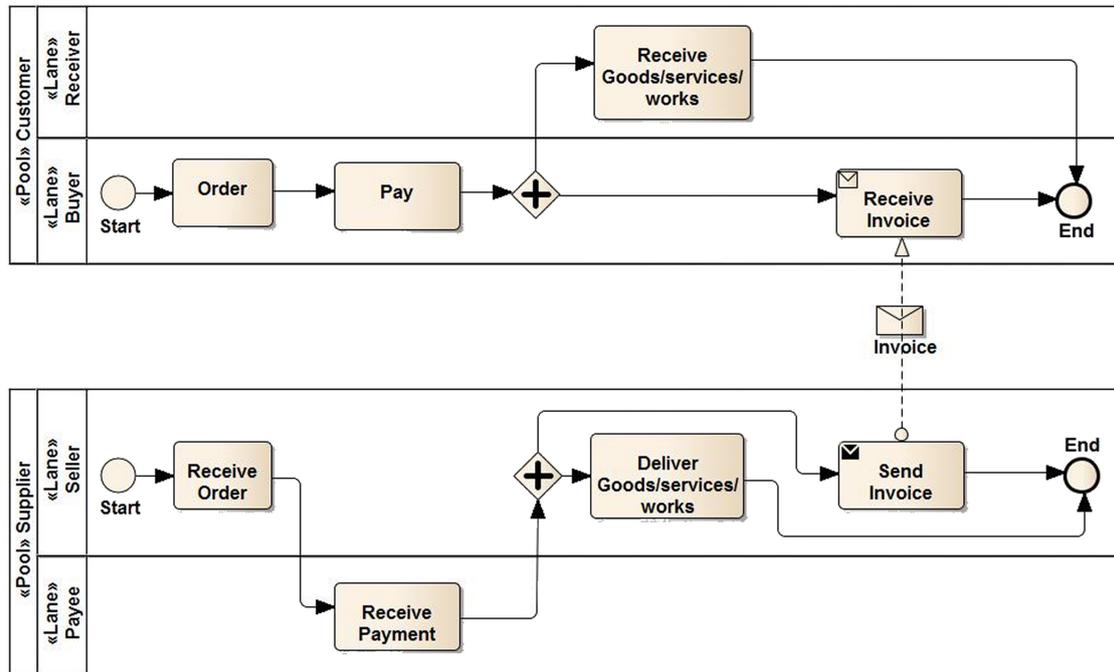


Figure 6 — Spot-payment

The Buyer purchases goods and services without any prior purchase order or contract (e.g. by ordering over the telephone, internet or over the counter). Payment is made in advance of the invoice, e.g. by means of a credit, debit or payment card or through a payment service provider. Note that sufficient business controls should be present in the administrations of both parties given the absence of written purchase orders. Invoicing may take place before, after or at the same time as the delivery. The invoice refers to the account or card number used for payment and states the amount paid in advance. An invoice may only refer to one delivery.

### 5.2.7 Payment in advance of delivery, based on a purchase order (P6)

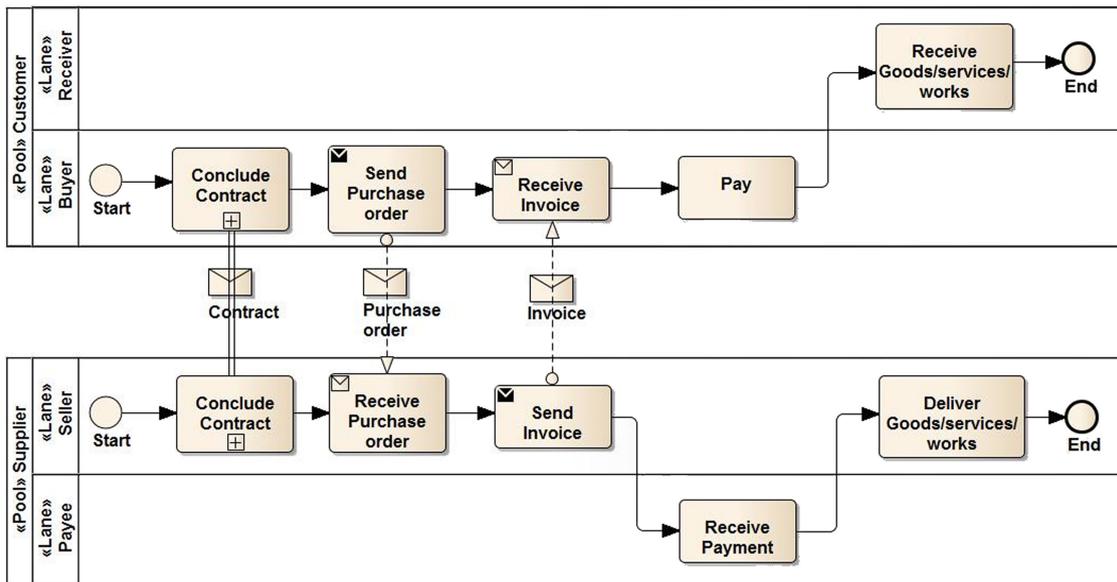


Figure 7 — Payment in advance of delivery, based on a purchase order

A Purchase Order is exchanged between the Buyer and the Seller, but it is agreed that invoicing and payment are made in advance of delivery. An invoice may only refer to one purchase order.

### 5.2.8 Invoices with references to a despatch advice (P7)

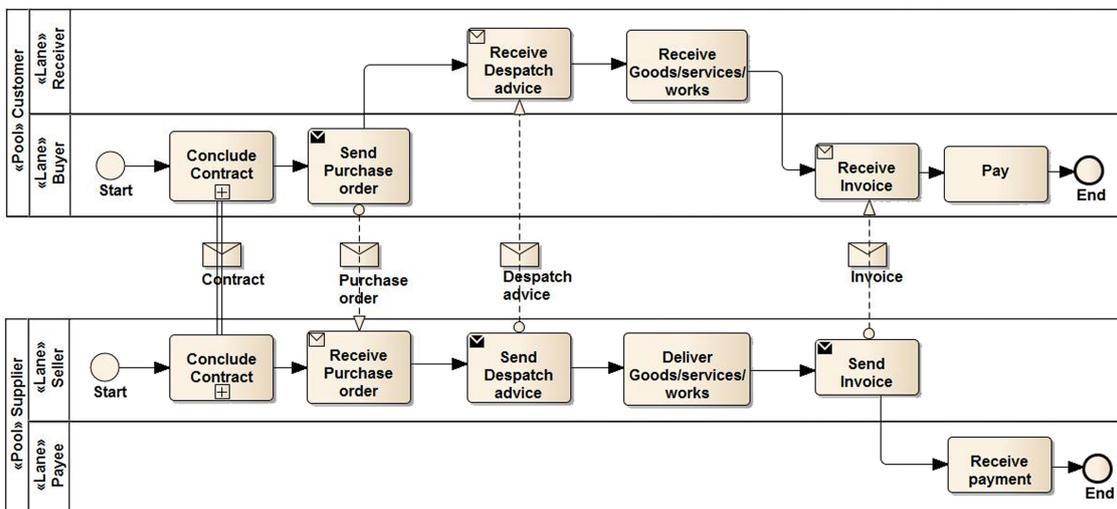


Figure 8 — Invoices with references to a despatch advice

After receipt of the purchase order the Seller sends a despatch advice in advance of the delivery. The despatch advice specifies one delivery. In the invoice a reference is made to the relevant despatch advice. The invoice content should reflect the content of despatch advice which it refers to. An invoice may only refer to one purchase order and one despatch advice.

### 5.2.9 Invoices with references to a despatch advice and a receiving advice (P8)

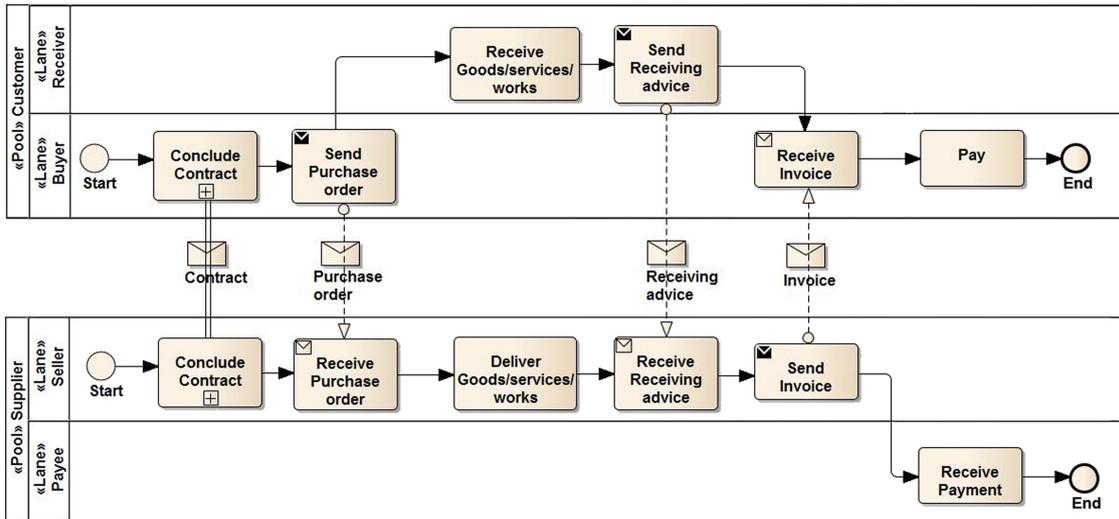


Figure 9 — Invoices with references to a despatch advice and a receiving advice

After delivery and before the invoice is issued, the Seller waits for a receiving advice from the Receiver, in which the Receiver acknowledges that the goods and services have been received and if there are any issues with the delivery. The Seller bases the invoice on information contained in the receiving advice. The invoice may refer to one despatch advice, one receiving advice and may also refer to only one purchase order.

### 5.2.10 Credit Note or negative invoicing (P9)

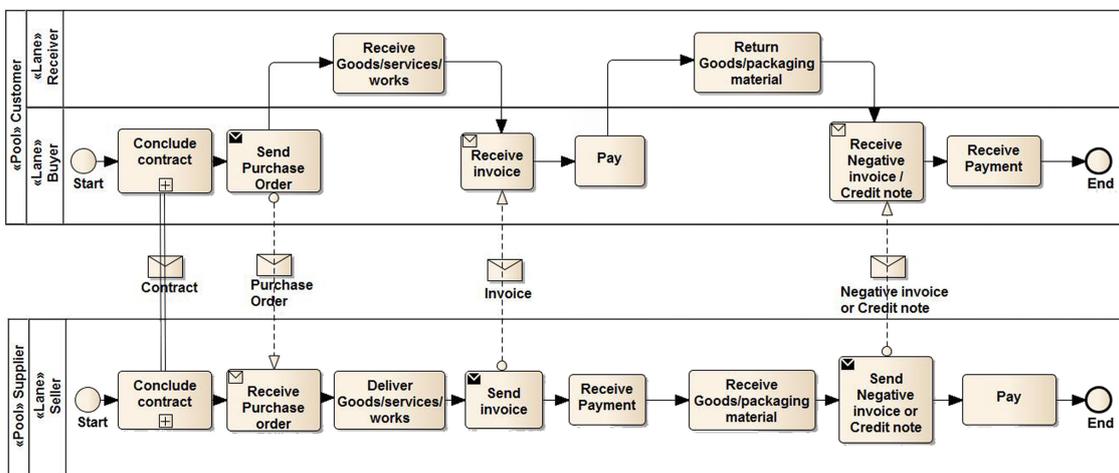


Figure 10 — Credit Note or negative invoicing

In the case of reimbursement of packaging material or returns, the total amount to be invoiced may be negative. In this case a credit note with a positive total amount may be sent instead of an invoice. The Seller will reimburse the Buyer, either by means of a negative invoice or by means

of a credit note. The invoice or credit note may refer to one delivery, one purchase order, one contract and one preceding invoice.

On the basis of a commercial agreement the Seller may apply a quarterly or yearly reimbursement (not shown in the diagram). A credit note may also be used in such case.

### 5.2.11 Corrective invoicing (P10)

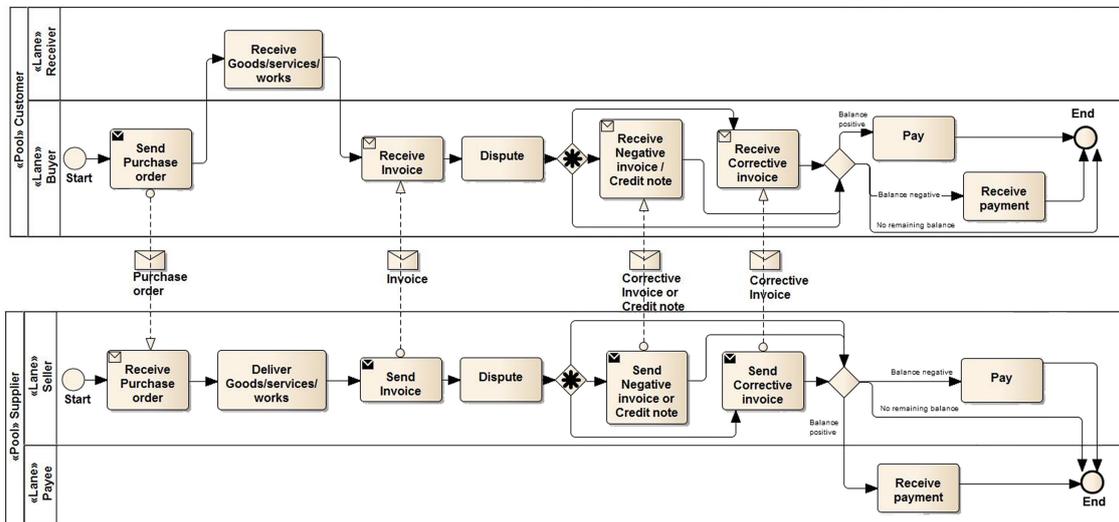


Figure 11 — Corrective invoicing

Many cases exist where an invoice is disputed and/or may need to be corrected. Product descriptions may be wrong, invoiced quantities may differ from delivered quantities, VAT rates may have changed, etc.

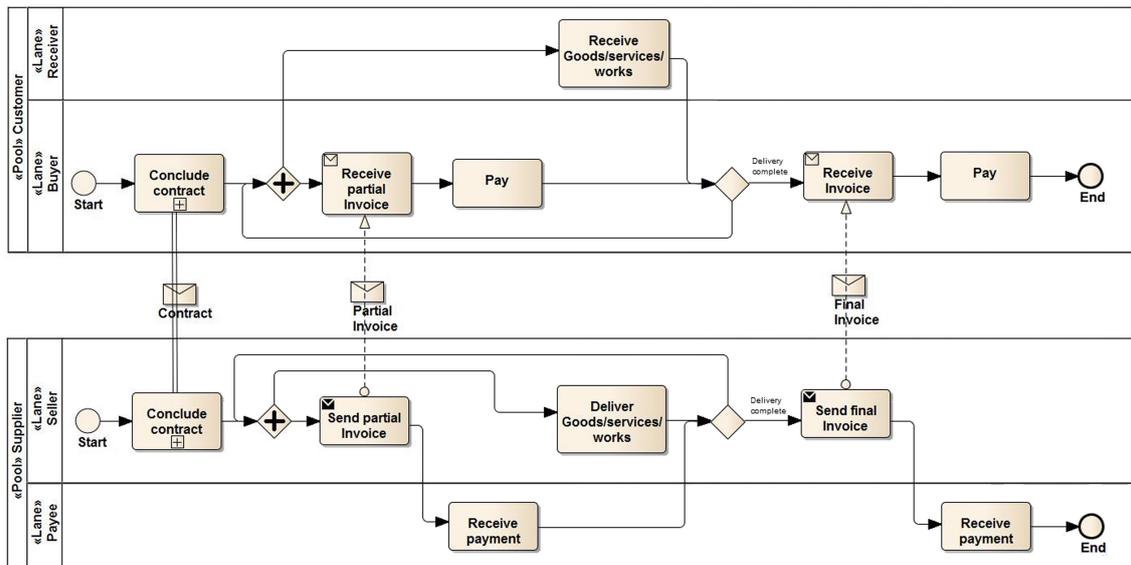
A disputed invoice may be corrected by means of the following mechanisms:

1. the disputed invoice may be replaced completely by first sending an identical credit note or an invoice in which the quantities and thus the line and total amounts have been made negative and then sending the correct invoice
2. alternatively an invoice, credit note or negative invoice may be sent with the difference in quantities and amounts between the correct invoice and the disputed invoice. Such a differential corrective invoice or credit note may contain lines that completely compensate lines in the disputed invoice with the corrected lines.

Corrective invoices and credit notes shall refer to the original invoice.

See Annex A for examples of these correction mechanisms.

## 5.2.12 Partial and final invoicing (P11)



**Figure 12 — Partial and final invoicing**

In some industries, such as Construction and Utilities, during the period of delivery one or more partial invoices are sent before the final invoice. Partial invoices may be estimates of consumption or requests for pre-payment. In some cases, the pre-payment requests do not state the VAT amounts; those are then only stated on the final invoice.

The final invoice shall refer to the partial invoices.

Note that partial invoices without VAT are not allowed in some member states.

### 5.2.13 Self-billing (P12)

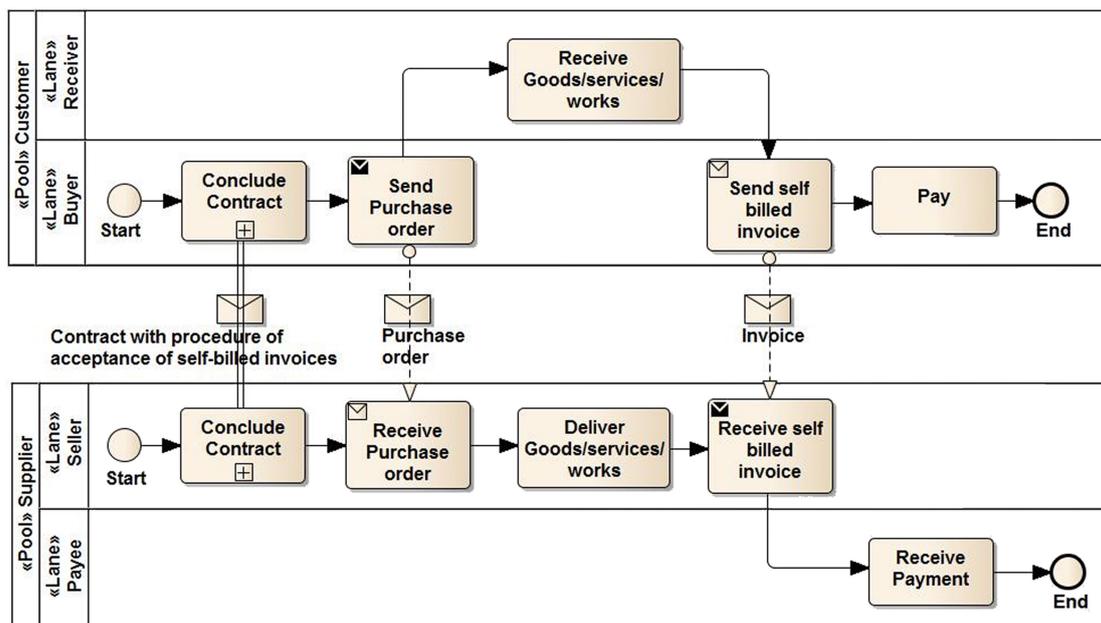


Figure 13 — Self-billing

In a self-billing process, the Buyer sends the invoice to the Seller. Both Buyer and Seller keep their responsibilities, so the invoice is still issued on behalf of the Seller. According to directive 2006/112/EC, the invoice shall be labelled as being a self-billed invoice and the requirements mentioned in article 224 of this directive shall be met. Self-billing may be introduced only if there is a prior agreement between the two parties and provided that a procedure exists for the acceptance of each invoice by the taxable person supplying the goods or services.

In case of self-billing, the Invoice type code shall be Self-billed invoice or Self-billed credit note. In this case the buyer will have legal responsibility for the invoice.

## 5.3 Invoicing functionality supported

### 5.3.1 Introduction

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.

In this subclause 5.3, an assessment is made of what information is needed for each of the functions listed above and whether it is in scope or out of scope for the core invoice model.

Functions that are in scope and thus are supported by the model have been assigned an identifier (e.g. R1) and have been given a description.

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.

The requirement identifiers are not necessarily consecutive or in sequence.

### **5.3.2 Accounting**

Recording a business transaction into the financial accounts of an organization is one of the main objectives of the invoice. According to financial accounting best practice and VAT rules every Taxable person shall keep accounts in sufficient detail for VAT to be applied and its application checked by the tax authorities. For that reason, an invoice shall provide for the information at document and line level that enables booking on both the debit and the credit side.

In scope for the core invoice model:

- R1 information at document level that enables the identification of the Payee, if different from the Seller (all processes, except P9);
- R2 information at document level that enables booking on both the debit and the credit side (all processes);
- R3 information at invoice line level that enables booking on the debit side (all processes);
- R4 Buyer-specific booking information (account numbers) (all processes).

Out of scope for the core invoice model:

- invoice sub-lines;
- booking information at sub-line level.

### **5.3.3 Invoice verification**

This process forms part of the Buyer's internal business controls. The invoice shall refer to an authentic commercial transaction. Support for invoice verification is a key function of an invoice. The invoice should provide sufficient information to look up relevant existing documentation, electronic or paper, for example, and as applicable to the models detailed above:

- the relevant purchase order;
- the contract;

- the call for tenders, that was the basis for the contract;
- the Buyer's reference;
- the confirmed receipt of the goods or services.

An invoice should also contain sufficient information that allows the received invoice to be transferred to a responsible authority, person or department, for verification and approval.

In scope for the core invoice model:

- R5 information to trace to a single related purchase order from the document level (all processes, except P2 and P5);
- R6 information to trace to a single related purchase order line from the invoice line (all processes, except P2 and P5);
- R7 information to trace to a single contract and the underlying call for tenders from the document level (all processes, except P3 and P5);
- R8 a reference supplied by the Buyer at document level (all processes);
- R9 information to trace to a single despatch advice from the document level (processes P7 and P8);
- R10 information to trace to a single receiving advice from the document level (process P8);
- R11 information to trace to a related invoice to be corrected from the document level (process P10);
- R12 reference to multiple part-invoices from a final invoice (process P12);
- R13 information to allow an invoice and related documents to be transferred to a responsible authority, entity, person or department, for verification and approval (all processes);
- R14 information about net price and the quantity on which the price is based at invoice line level, additional information such as gross price and price discount may be added (all processes);
- R15 descriptive and coded information about allowances and charges at both document level and at invoice line level (all processes);
- R16 information about charges, (non-VAT-)taxes, duties and levies, with their VAT information, that are not included in the line amounts at document level (all processes);
- R17 information about charges, (non-VAT-)taxes, duties and levies that compose the taxable amount and are not included in the unit price at separate invoice lines, with a proper identification and/or description (all processes);
- R18 information about charges at invoice line level as part of the line amount (all processes);
- R19 the amounts of allowances and charges at document and invoice line level (all processes);
- R20 textual descriptions of invoiced goods and services at invoice line level (all processes);
- R21 identification of invoiced goods and services by means of a Seller's item number at invoice line level (all processes);
- R22 identification of invoiced goods and services by means of a Buyer's item number at invoice line level (all processes);
- R23 identification of invoiced goods and services by means of a qualified general item identifier at invoice line level as agreed by the Buyer and the Seller (all processes);

- R24 classification of invoiced goods and services by means of applicable classification identifiers and schema reference as agreed between the Seller and the Buyer at invoice line level (all processes);
- R25 information about returned and credited returnable assets or packages, such as pallets, and package charges, stated as normal invoice lines (all processes);
- R26 information about returnable asset charges, stated as normal invoice lines (all processes);
- R27 information about returned goods, stated as normal invoice lines (all processes);
- R28 descriptive information about attributes of goods and services at invoice line level (all processes);
- R29 information about the country of origin of goods and services at invoice line level (all processes);
- R30 an invoice line period at invoice line level (process P2, P11);
- R31 one delivery date at document level (all processes);
- R32 one delivery location or address at document level (all processes);
- R33 identification of the invoiced object at document and line level (process P2);
- R34 a delivery/invoice period at document level (process P2, P11);
- R35 attached documents of a limited set of file types (all processes);
- R36 multiple attached or referenced documents at document level (all processes);
- R37 a VAT category and rate at invoice line level (all processes);
- R38 VAT totals per category at document level (all processes);
- R39 a quantity and a net amount (exclusive of VAT) at invoice line level (all processes);
- R40 all amounts at document and invoice line level that make up the invoice total amount and the amount due for payment (all processes);
- R41 Reference to a sales order, issued by the Seller at document level (all processes);
- R42 Allowance/charge percentage and base amount at document and invoice line level (all processes);
- R44 Information to allow automated validation of a received electronic invoice (all processes).

Out of scope for the core invoice model:

- reference to multiple related purchase orders;
- reference to one or more related purchase order lines on header level;
- reference to multiple related purchase order lines on line level;
- reference to multiple contracts;
- reference to one or more price lists;
- reference to more than one despatch advice or shipping note;

- reference to the exact time of delivery;
- reference to one or more delivery notes, shipping notices or despatch advices or -lines at invoice line level;
- reference to more than one receiving advice;
- reference to one or more receiving advice lines at invoice line level;
- reference to supporting documents at invoice line level;
- reference to one or more consumption reports or performance records;
- reference to one or more invoices for payment in advance;
- reference to multiple sales orders (issued by the Seller);
- sub-lines of allowances and charges;
- delivered quantities of goods and services if different from invoiced quantities;
- ordered quantities of goods and services if different from invoiced quantities;
- back-ordered quantities of goods and services if different from invoiced quantities;
- coded attributes of goods and services;
- specific coded quality information of goods or services;
- structured metered values;
- lot numbers of goods and services (except in free text);
- serial numbers or other identification numbers (e.g. of the person rendering the services) (except in free text);
- reference to multiple deliveries;
- reference to a delivery at invoice line level.

#### **5.3.4 VAT reporting**

The invoice is used to carry VAT related information from the Seller to the Buyer to enable the Buyer and Seller to correctly handle VAT booking and reporting. An invoice should contain sufficient information to enable the Buyer and any auditor to determine whether the invoice is correct from a VAT point of view.

The invoice shall allow the determination of the VAT regime, the calculation and description of the tax, in accordance with the European Directive 2006/112/EC [2] and subsequent amendments. VAT reporting applies to all processes.

In scope for the core invoice model:

- R45 information to determine the requirements of the applicable VAT legislation in force and the calculation and reporting thereof;

- R46 information on the date the VAT is liable at document level;
- R47 the necessary elements for national legal VAT requirements that apply for invoices issued to national and foreign Buyers, such as the legal registration status of the Seller;
- R48 information to support the following VAT use cases:
- Invoices for supplies for which VAT is charged;
  - Invoices for supplies for which VAT is not charged based on an exemption reason;
  - Invoices for supplies for which the Seller's goods and services are exempt from VAT at line level;
  - Invoices for supplies that are issued under reverse charge;
  - Invoices for exempt intra-community supplies for which an intra-community acquisition has to be done;
  - Invoices for supplies outside the scope of the Directive 2006/112/EC [2] (non-VAT invoices);
- R49 the total VAT amount at document level;
- R50 total taxable amount per VAT rate at document level;
- R51 any additional information required to support the exemption evidence in case VAT is not charged based on an exemption reason at document and at invoice line level;
- R52 the legal registration number and the VAT registration number of the Seller and Buyer and the VAT registration number of the Tax representative of the Supplier;
- R53 the official postal address of the Buyer, Seller and Tax representative of the Supplier and their place of business and registered office;
- R54 the invoice currency and the VAT accounting currency at document level if different from the invoice currency;
- R55 codes for exemption reasons at document and invoice line level.

Out of scope for the core invoice model:

- refund applications (Directive 2008/9/EC [5]);
- structured information that is commonly provided in page footnote of business documents, such as:
  - share Capital Amount of the Seller;
  - legal form of the Seller.

### 5.3.5 Auditing

Companies audit themselves as means of internal control or they may be audited by external parties as part of a legal obligation. Accounting is a regular, ongoing process whereas an audit is a separate review process to ensure that the accounting has been carried out correctly. The auditing process places certain information requirements on an invoice. These requirements are mainly related to enable verification of authenticity and integrity of the accounting transaction. Auditing requirements apply to all of the above processes.

Invoices, conformant to the core invoice model support the auditing process by providing sufficient information for:

- identification of the relevant Buyer and Seller;
- identification of the products and services traded, including description, value and quantity;
- information for connecting the invoice to its payment;
- information for connecting the invoice to relevant documents such as a contract and a purchase order.

In scope for the core invoice model:

R56 sufficient information to support the auditing process with regard to:

- identification of the invoice;
- identification of the date of issue of the invoice;
- identification of the products and services traded, including their description, value and quantity;
- information for relating the invoice to its settlement;
- information for relating the invoice to relevant documents such as a contract, a purchase order and a despatch advice;
- information about the reason for invoice correction (process P10);

R57 identification of the parties that fulfil the following roles at the invoice level, including their legal name and address:

- the Seller (including the Seller's trade name);
- the Buyer;
- the Deliver to party (if different from the Buyer);
- the Payee (if different from the Seller);
- the Tax representative of the Supplier;

Out of scope for the core invoice model:

- identification of:
  - the carrier;
  - the creditor (if different from Payee);
  - the debtor (if different from Buyer);
  - the identification of the service or business unit of the Seller, issued by the Buyer;
  - subtotals for part of the lines.

### **5.3.6 Payment**

An invoice represents a claim for payment. The issuance of an invoice may take place either before or after the payment is carried out. When an invoice is issued before payment it represents a request to the Buyer to pay, in which case the invoice commonly contains information that enables the Buyer, in the role of a debtor, to correctly initiate the transfer of the

payment, unless that information is already agreed in prior contracts or by means of payment instructions separately lodged with the Buyer.

If an invoice is issued after payment, such as when the order process included payment instructions or when paying with a credit card, online or telephonic purchases, the invoice may contain information about the payment made in order to facilitate invoice to payment reconciliation on the Buyer side. An invoice may be partially paid before issuing such as when a pre-payment is made to confirm an order.

Invoices, conformant with the core invoice model should identify the means of payment for settlement of the invoice and clearly state what payment amount is requested. They should provide necessary details to support bank transfers in accordance with the Single Euro Payments Area (SEPA) for payments in Euro and the relevant national payment practices for other currencies. Payments by means of Credit Transfer, Direct debit, and Payment Card are in scope for making payments of invoices conformant with the core invoice model.

Payment information is needed in all processes.

In scope for the core invoice model:

- R58 identification of the means of settlement;
- R59 the requested amount due for payment;
- R60 the date on which payment is due;
- R61 necessary details to support bank transfers in accordance with SEPA and national systems;
- R62 a reference number and any additional reference data to be included in the payment;
- R63 reference number and any additional reference data to be included in the payment, in order to relate the payment to the invoice;
- R64 information for relating an invoice to a payment card used for settlement;
- R65 basic information to support national payment systems for use in domestic trade;
- R66 information about the amount that was pre-paid;
- R67 invoices that have a total amount of zero;
- R68 invoices that have an amount to pay of zero;
- R69 necessary details to support direct debits.
- R70 pre-payment invoices

Out of scope for the core invoice model:

- instalments;
- references to pre-payments;
- early-payment allowances in a structured way;
- late-payment penalty schemes in a structured way;
- quoted or referenced structured payment terms.

### **5.3.7 Inventory**

Invoices are sometimes used by the Buyer for placing goods into inventory, as replacement of more appropriate documents such as despatch advices or packing lists. Support for inventory management is not in scope of the core invoice model, although it is recognized that information provided for other processes, supported in the core invoice model, may be used for placing goods into inventory.

Out of scope for the core invoice model:

- information to support inventory management.

### **5.3.8 Delivery process**

Invoices may be used by the business partners involved for: order picking, delivery instructions and receipt; as a replacement for more appropriate documents such as: Instructions to despatch, transport documents or packing lists. Specific support for delivery processes is however not in scope for the core invoice model and other appropriate electronic documents should be used.

Out of scope for the core invoice model:

- information to support the delivery process;
- delivery terms.

### **5.3.9 Customs clearance**

When goods are cleared through customs, important information about the goods being cleared may be extracted from the invoice. Customs clearing may also require special information such as the origin of the items, materials used and other issues that may affect the classification and the calculation of import duties and taxes. For customs purposes an invoice may also contain the customs classification itself.

The core invoice model is not intended to specifically support customs clearance in general although information provided for other processes supported in the invoice may be used for customs purposes.

Out of scope for the core invoice model:

- specific support for customs clearance.

### **5.3.10 Marketing**

Invoices may be used to deliver marketing messages to the Buyer in the form of text or as images, but no specific marketing information is within scope of the core invoice model.

Out of scope for the core invoice model:

- specific support for marketing.

### **5.3.11 Reporting**

Invoices, such as utility invoices, frequently contain detailed information about usage of services that provide a breakdown of the total quantity in the invoice itself. No specific reporting information is within scope of the core invoice model itself but such information can be provided e.g. with attachments.

Out of scope for the core invoice model:

- specific reporting information.

## 5.4 The core invoice model in relation to other documents in the procurement process

An invoice, compliant with the core invoice model may reference only one purchase order and one delivery explicitly. Such an invoice may still be used if only general, unqualified references to multiple purchase orders and/or deliveries suffice. For automatic processing of invoices, however, usually explicit, qualified references are needed. The core invoice model would need to be supplemented with use of an extension to support a process where multiple purchase orders and deliveries are to be invoiced with one invoice. Alternatively, steps could be taken to change the business process and send one invoice per purchase order or delivery. This is especially in view of the convenience of electronic initiation for generating higher frequency invoicing.

The relationships between the invoice and other documents and events are depicted in Figure 14. The listed documents should be interpreted in the scope of the relevant business processes, modelled in 5.2.

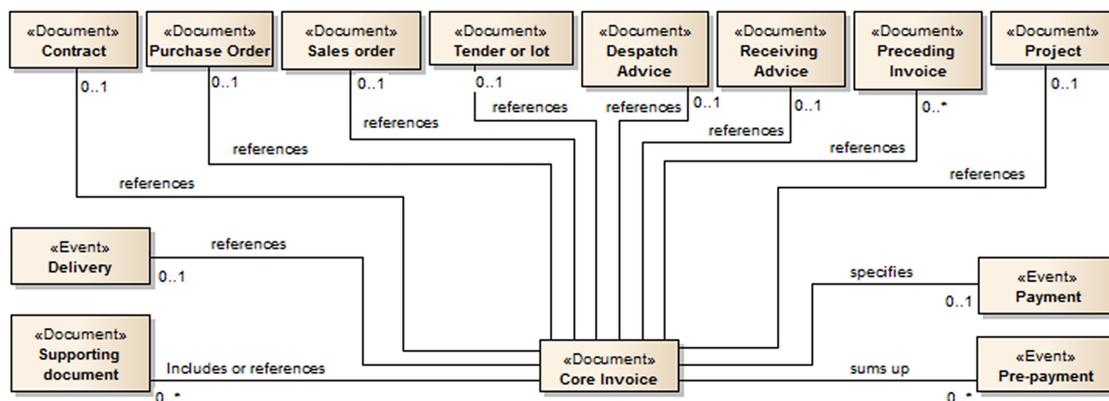


Figure 14 — Invoice relations

NOTE 1 A Purchase order is an object that may be the result of exchanging a number of documents, such as confirmations and purchase order changes.

NOTE 2 An invoice does, according to the core invoice model, not refer to each pre-payment event, but merely cites the total pre-paid amount.

## 6 The semantic data model of the core elements of an electronic invoice and credit note

### 6.1 Introduction

This Clause 6 describes the information elements, and groups of information elements, that constitutes the semantic data model of the core elements of an electronic Invoice, as well as their relationship and the business rules required to ensure the integrity and consistency in the data provided in a compliant instance document (an individual Invoice).

For an instance document to be compliant to the core invoice model, it shall respect all rules defined in this Clause 6.

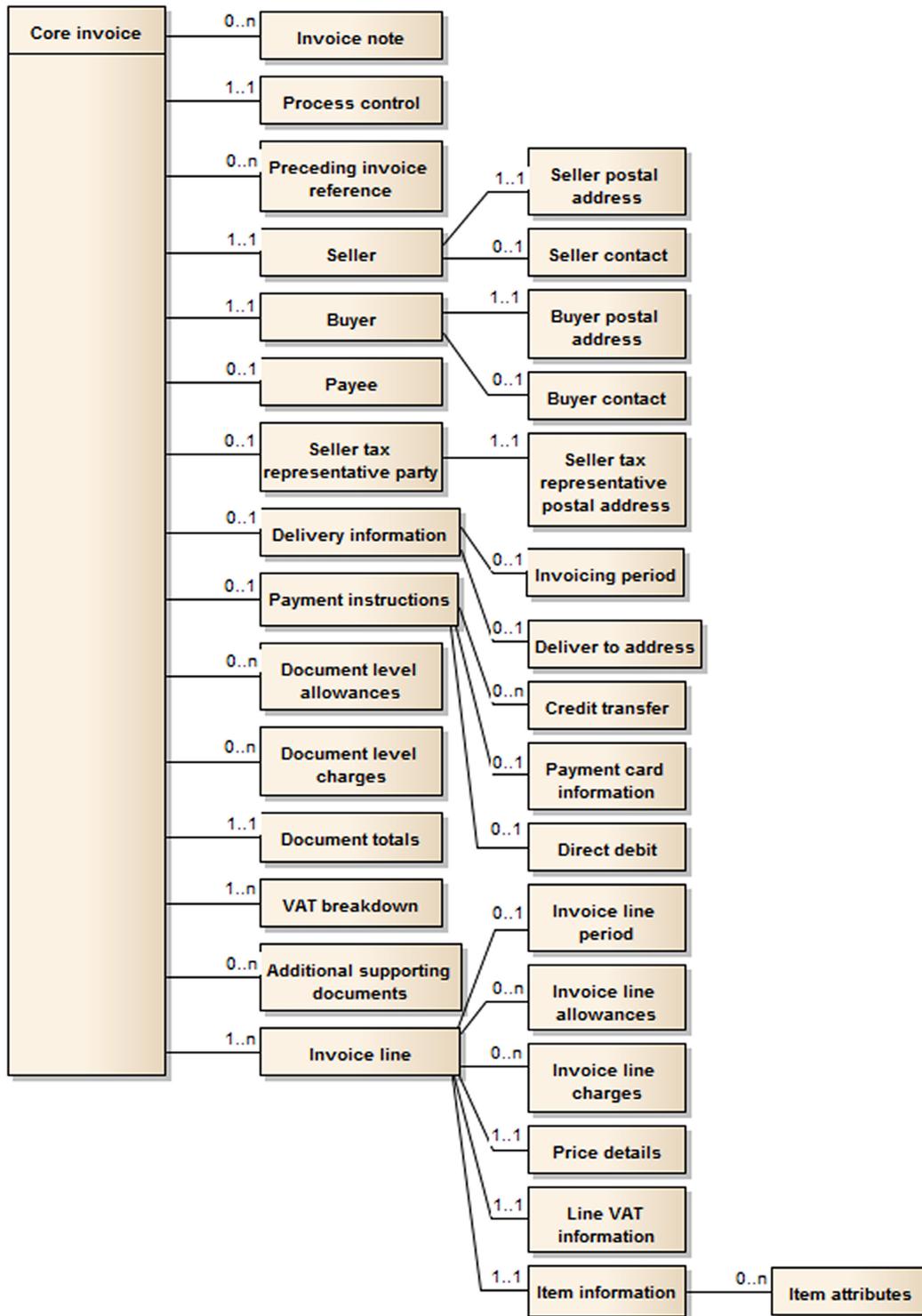
It is the responsibility of the invoice issuer to ensure that an Invoice respects any rules defined by relevant legislation, including requirements related to personal data protection, as well as rules stated as part of a trading relationship between the Seller and the Buyer. An Invoice conforming to the rules of the semantic data model of the core elements of an electronic Invoice as described in this Clause 6 does not guarantee its legal compliance OR compliance to contractual obligations.

An overview of the groups of information elements contained in the semantic model is provided in Figure 15. Each of these groups and their detailed content is explained in detail in 6.2.

The business rules defined in order to ensure the integrity and consistency in the data provided in a compliant instance document can be found in 6.3.

The semantic data type assigned to individual information elements in the core invoice model to specify data format and metadata requirements that apply are detailed in 6.4.

Calculation examples are provided in 6.5.



NOTE The figure only shows the information element groups. Individual information elements are not shown.

**Figure 15 — Overview of the semantic model**

## 6.2 Legend

Each information element, as well as groups of information elements, that constitutes the semantic data model of the core elements of an electronic Invoice is described as a row in the table documented in 6.3 where the following information is provided:

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type
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ID: An identifier for the information element (BT - Business Term) and group of information elements (BG - Business terms Group). The identifiers are not necessarily consecutive or in sequence.

Level: Indicates on which level in the model the information element occurs:

- +: The first level of the model;
- ++: The second level of the model. The information element (or the group of information elements) is part of a group of information elements which is defined at the first level of the model;
- +++: The third level of the model. The information element (or the group of information elements) is part of a group of information elements which is defined at the second level of the model;
- ++++: The fourth level of the model. The information element is part of a group of information elements which is defined at the third level of the model.

Cardinality: Also known as multiplicity is used to indicate if an information element (or group of information elements) is mandatory or conditional, and if it is repeatable. The cardinality shall always be analysed in the context of where the information element is used. Example: the Payee Name is mandatory in the core invoice model, but only when a Payee is stated and is relevant.

The following cardinalities exist:

- 1..1: Mandatory, minimum 1 occurrence and maximum 1 occurrence of the information element (or group of information elements) shall be present in any compliant instance document;
- 1..n: Mandatory and repeatable, minimum 1 occurrence and unbounded upper maximum occurrences of the information element (or group of information elements) shall be present in any compliant instance document;

- 0..1: Conditional, minimum 0 occurrences and maximum 1 occurrence of the information element (or group of information elements) may be present in any compliant instance document; it's use depends on business rules stated as well as the regulatory, commercial and contractual conditions that applies to the business transaction;
- 0..n: Conditional and repeatable, minimum 0 occurrences and unbounded upper maximum occurrences of the information element (or group of information elements) may be present in any compliant instance document; it's use depends on business rules stated as well as the regulatory, commercial and contractual conditions that applies to the business transaction.

**Business Term:** The name of the information element used in the core invoice model or the name of a coherent group of related information elements, provided to give logical meaning.

**Description:** A description of the semantic meaning of the information element.

**Usage Note:** Clarifying information on how the information element shall or may be used (such as calculation rules).

**Req. ID:** The requirement identifier, provided to show the traceability of the information element with the corresponding requirement defined in Clause 5.

**Semantic data type:** The data format that applies to the information element (see 6.5).

Supplementary components or attributes are specified with the Business Term they belong to.

Note that in the naming of business terms, in descriptions and in usage notes, the term "invoice" also applies to Credit notes, unless mentioned otherwise.

### 6.3 The semantic model

Table 2 — Semantic data model of the core elements of an electronic invoice

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-1	+	1..1	Invoice number	A unique identification of the Invoice.	The sequential number required in Article 226(2) of the directive 2006/112/EC [2], to uniquely identify the Invoice within the business context, time-frame, operating systems and records of the Seller. It may be based on one or more series of numbers, which may include alphanumeric characters. No identification scheme is to be used.	R56	Identifier
BT-2	+	1..1	Invoice issue date	The date when the Invoice was issued.		R56	Date
BT-3	+	1..1	Invoice type code	A code specifying the functional type of the Invoice.	Commercial invoices and credit notes are defined according the entries in UNTDID 1001 [6]. Other entries of UNTDID 1001 [6] with specific invoices or credit notes may be used if applicable.	R44	Code

<sup>3</sup> The suffix ".Type" has been deleted for readability.

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
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.	Only one currency shall be used in the Invoice, except for the Invoice total VAT amount in accounting currency (BT-111) in accordance with article 230 of Directive 2006/112/EC on VAT [2]. The lists of valid currencies are registered with the ISO 4217 Maintenance Agency "Codes for the representation of currencies and funds". Shall be used in combination with the Invoice total VAT amount in accounting currency (BT-111) when the VAT accounting currency code differs from the Invoice currency code.	R54, R47	Code
BT-6	+	0..1	VAT accounting currency code	The currency used for VAT accounting and reporting purposes as accepted or required in the country of the Seller.	The lists of valid currencies are registered with the ISO 4217 Maintenance Agency "Codes for the representation of currencies and funds". Please refer to Article 230 of the Council Directive 2006/112/EC [2] for more information.	R54	Code

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-7	+	0..1	Value added tax point date	The date when the VAT becomes accountable for the Seller and for the Buyer in so far as that date can be determined and differs from the date of issue of the invoice, according to the VAT directive.	The tax point is usually the date goods were supplied or services completed (the 'basic tax point'). There are some variations. Please refer to Article 226 (7) of the Council Directive 2006/112/EC [2] for more information. This element is required if the Value added tax point date is different from the Invoice issue date. Both Buyer and Seller should use the Tax Point Date when provided by the Seller. The use of BT-7 and BT-8 is mutually exclusive.	R45 R46	Date
BT-8	+	0..1	Value added tax point date code	The code of the date when the VAT becomes accountable for the Seller and for the Buyer.	The code shall distinguish between the following entries of UNTDID 2005 [6]: - Invoice document issue date - Delivery date, actual - Paid to date The Value added tax point date code is used if the Value added tax point date is not known when the invoice is issued. The use of BT-8 and BT-7 is mutually exclusive.	R45 R46	Code
BT-9	+	0..1	Payment due date	The date when the payment is due.	The payment due date reflects the due date of the net payment. For partial payments it states the first net due date. The corresponding description of more complex payment terms can be stated in BT-20 Payment terms.	R60	Date
BT-10	+	0..1	Buyer reference	An identifier assigned by the Buyer used for internal routing purposes.	The identifier is defined by the Buyer (e.g. contact ID, department, office id, project code), but provided by the Seller in the Invoice.	R8	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-11	+	0..1	Project reference	The identification of the project the invoice refers to		R44	Document reference
BT-12	+	0..1	Contract reference	The identification of a contract.	The contract identifier should be unique in the context of the specific trading relationship and for a defined time period.	R7	Document reference
BT-13	+	0..1	Purchase order reference	An identifier of a referenced purchase order, issued by the Buyer.		R5, R56	Document reference
BT-14	+	0..1	Sales order reference	An identifier of a referenced sales order, issued by the Seller.		R41	Document reference
BT-15	+	0..1	Receiving advice reference	An identifier of a referenced receiving advice.		R10, R56	Document reference
BT-16	+	0..1	Despatch advice reference	An identifier of a referenced despatch advice.		R9, R56	Document reference
BT-17	+	0..1	Tender or lot reference	The identification of the call for tender or lot the invoice relates to.	In some countries a reference to the call for tender that has led to the contract shall be provided.	R7, R4	Document reference
BT-18	+	0..1	Invoiced object identifier	An identifier for an object on which the invoice is based, given by the Seller.	It may be a subscription number, telephone number, meter point, vehicle, person etc., as applicable.	R33	Identifier
		0..1	Scheme identifier	The identification scheme identifier of the Invoiced object identifier.	If it may be not clear for the receiver what scheme is used for the identifier, a conditional scheme identifier should be used that shall be chosen from the UNTDID 1153 code list [6] entries.		
BT-19	+	0..1	Buyer accounting reference	A textual value that specifies where to book the relevant data into the Buyer's financial accounts.		R2, R4	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-20	+	0..1	Payment terms	A textual description of the payment terms that apply to the amount due for payment (Including description of possible penalties).	This element may contain multiple lines and multiple terms.	R60	Text
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.		R56	
BT-21	++	0..1	Invoice note subject code	The subject of the textual note in BT-22.	To be chosen from the entries in UNTDID 4451 [6].	R56	Text
BT-22	++	1..1	Invoice note	A textual note that gives unstructured information that is relevant to the Invoice as a whole.	Such as the reason for any correction or assignment note in case the invoice has been factored	R56	Text
BG-2	+	1..1	PROCESS CONTROL	A group of business terms providing information on the business process and rules applicable to the Invoice document.		R44	
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.	To be specified by the Buyer.	R44	Text
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.	This identifies compliance or conformance to this document. Compliant invoices specify: urn:cen.eu:en16931:2017. Invoices, compliant to a user specification may identify that user specification here. No identification scheme is to be used.	R44	Identifier

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BG-3	+	0..n	PRECEDING INVOICE REFERENCE	A group of business terms providing information on one or more preceding Invoices.	To be used in case: - a preceding invoice is corrected - preceding partial invoices are referred to from a final invoice - preceding pre-payment invoices are referred to from a final invoice	R11 R12	
BT-25	++	1..1	Preceding Invoice reference	The identification of an Invoice that was previously sent by the Seller.		R11 R12	Document reference
BT-26	++	0..1	Preceding Invoice issue date	The date when the Preceding Invoice was issued.	The Preceding Invoice issue date shall be provided in case the Preceding Invoice identifier is not unique.	R11 R12	Date
BG-4	+	1..1	SELLER	A group of business terms providing information about the Seller.		R48	
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.		R48	Text
BT-28	++	0..1	Seller trading name	A name by which the Seller is known, other than Seller name (also known as Business name).	This may be used if different from the Seller name.	R48	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-29	++	0..n	Seller identifier	An identification of the Seller.	For many systems, the Seller identifier is a key piece of information. Multiple Seller identifiers may be assigned or specified. They may be differentiated by using various identification schemes. If no scheme is specified, it should be known by Buyer and Seller, e.g. a previously exchanged Buyer assigned identifier of the Seller.	R57	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.	If used, the identification scheme identifier shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	R52	Identifier
BT-31	++	0..1	Seller VAT identifier	The Seller's VAT identifier (also known as Seller VAT identification number).	If no identification scheme is specified, it should be known by Buyer and Seller. If used, the identification scheme shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency. VAT number prefixed by a country code. A VAT registered Supplier shall include his VAT ID, except when he uses a tax representative.	R52	Identifier
BT-32	++	0..1	Seller tax registration identifier	The local identification (defined by the Seller's address) of the Seller for tax purposes or a reference that enables the Seller to state his registered tax status.	This information may affect how the Buyer settles the payment (such as for social security fees). E.g. in some countries, if the Seller is not registered as a tax paying entity then the Buyer is required to withhold the amount of the tax and pay it on behalf of the Seller.	R47	Identifier
BT-33	++	0..1	Seller additional legal information	Additional legal information relevant for the Seller.	Such as share capital.	R47	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
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.		R13, R57	Identifier
BG-5	++	1..1	SELLER POSTAL ADDRESS	The identification scheme identifier of the Seller electronic address.	The scheme identifier shall be chosen from a list to be maintained by the Connecting Europe Facility.	R53	
BT-35	+++	0..1	Seller address line 1	A group of business terms providing information about the address of the Seller.	Sufficient components of the address are to be filled to comply with legal requirements.	R53	Text
BT-36	+++	0..1	Seller address line 2	The main address line in an address.	Usually the street name and number or post office box.	R53	Text
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.		R53	Text
BT-37	+++	0..1	Seller city	An additional address line in an address that can be used to give further details supplementing the main line.		R53	Text
BT-38	+++	0..1	Seller post code	The common name of the city, town or village, where the Seller address is located.		R53	Text
BT-39	+++	0..1	Seller country subdivision	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	R53	Text
				The subdivision of a country.	Such as a region, a county, a state, a province, etc.	R53	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-40	+++	1..1	Seller country code	A code that identifies the country.	If no tax representative is specified, this is the country where VAT is liable. The lists of valid countries are registered with the EN ISO 3166-1 Maintenance agency, "Codes for the representation of names of countries and their subdivisions".	R53	Code
BG-6	++	0..1	SELLER CONTACT	A group of business terms providing contact information about the Seller.		R57	
BT-41	+++	0..1	Seller contact point	A contact point for a legal entity or person.	Such as person name, contact identification, department or office identification.	R57	Text
BT-42	+++	0..1	Seller contact telephone number	A phone number for the contact point.		R57	Text
BT-43	+++	0..1	Seller contact email address	An e-mail address for the contact point.		R57	Text
BG-7	+	1..1	BUYER	A group of business terms providing information about the Buyer.		R57	
BT-44	++	1..1	Buyer name	The full name of the Buyer.		R57	Text
BT-45	++	0..1	Buyer trading name	A name by which the Buyer is known, other than Buyer name (also known as Business name).	This may be used if different from the Buyer name.	R57	Text
BT-46	++	0..1	Buyer identifier	An identifier of the Buyer.	If no scheme is specified, it should be known by Buyer and Seller, e.g. a previously exchanged Seller assigned identifier of the Buyer.	R57	Identifier
		0..1	Scheme identifier	The identification scheme identifier of the Buyer identifier.	If used, the identification scheme shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.		

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
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.	If no identification scheme is specified, it should be known by Buyer and Seller, e.g. the identifier that is exclusively used in the applicable legal environment.	R47, R52, R57	Identifier
		0..1	Scheme identifier	The identification scheme identifier of the Buyer legal registration identifier.	If used, the identification scheme shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.		
BT-48	++	0..1	Buyer VAT identifier	The Buyer's VAT identifier (also known as Buyer VAT identification number).	VAT number prefixed by a country code based on EN ISO 3166-1 "Codes for the representation of names of countries and their subdivisions"	R45, R52, R57	Identifier
BT-49	++	0..1	Buyer electronic address	Identifies the Buyer's electronic address to which the invoice is delivered.		R13, R57	Identifier
		1..1	Scheme identifier	The identification scheme identifier of the Buyer electronic address.	The scheme identifier shall be chosen from a list to be maintained by the Connecting Europe Facility.		
BG-8	++	1..1	BUYER POSTAL ADDRESS	A group of business terms providing information about the postal address for the Buyer.	Sufficient components of the address are to be filled to comply with legal requirements.	R53	
BT-50	+++	0..1	Buyer address line 1	The main address line in an address.	Usually the street name and number or post office box.	R53	Text
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.		R53	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
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.		R53	Text
BT-52	+++	0..1	Buyer city	The common name of the city, town or village, where the Buyer's address is located.		R53	Text
BT-53	+++	0..1	Buyer post code	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	R53	Text
BT-54	+++	0..1	Buyer country subdivision	The subdivision of a country.	Such as a region, a county, a state, a province, etc.	R53	Text
BT-55	+++	1..1	Buyer country code	A code that identifies the country.	The lists of valid countries are registered with the EN ISO 3166-1 Maintenance agency, "Codes for the representation of names of countries and their subdivisions".	R53	Code
BG-9	++	0..1	BUYER CONTACT	A group of business terms providing contact information relevant for the Buyer.	Contact details can be given by the Buyer at the time of the ordering or as master data exchanged prior to ordering. Contact details should not be used for the purpose of routing the received Invoice internally by the recipient; the Buyer reference identifier should be used for this purpose.	R57	
BT-56	+++	0..1	Buyer contact point	A contact point for a legal entity or person.	Such as person name, contact identification, department or office identification.	R57	Text
BT-57	+++	0..1	Buyer contact telephone number	A phone number for the contact point.		R57	Text
BT-58	+++	0..1	Buyer contact email address	An e-mail address for the contact point.		R57	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BG-10	+	0..1	PAYEE	A group of business terms providing information about the Payee, i.e. the role that receives the payment.	The role of Payee may be fulfilled by another party than the Seller, e.g. a factoring service.	R1, R57	
BT-59	++	1..1	Payee name	The name of the Payee.	Shall be used when the Payee is different from the Seller. The Payee name may however be the same as the Seller name.	R1, R57	Text
BT-60	++	0..1	Payee identifier	An identifier for the Payee.	If no scheme is specified, it should be known by Buyer and Seller, e.g. a previously exchanged Buyer or Seller assigned identifier.	R1, R57	Identifier
		0..1	Scheme identifier	The identification scheme identifier of the Payee identifier.	If used, the identification scheme shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.		
BT-61	++	0..1	Payee legal registration identifier	An identifier issued by an official registrar that identifies the Payee as a legal entity or person.	If no scheme is specified, it should be known by Buyer and Seller, e.g. the identifier that is exclusively used in the applicable legal environment.	R1	Identifier
		0..1	Scheme identifier	The identification scheme identifier of the Payee legal registration identifier.	If used, the identification scheme shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.		
BG-11	+	0..1	SELLER TAX REPRESENTATIVE PARTY	A group of business terms providing information about the Seller's tax representative.		R57	
BT-62	++	1..1	Seller tax representative name	The full name of the Seller's tax representative party.		R57	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-63	++	1..1	Seller tax representative VAT identifier	The VAT identifier of the Seller's tax representative party.	VAT number prefixed by a country code based on EN ISO 3166-1 "Codes for the representation of names of countries and their subdivisions".	R52	Identifier
BG-12	++	1..1	SELLER TAX REPRESENTATIVE POSTAL ADDRESS	A group of business terms providing information about the postal address for the tax representative party.	The Seller tax representative name/postal address shall be provided in the invoice, if the Seller has a tax representative who is liable to pay the VAT due. Sufficient components of the address are to be filled to comply with legal requirements.	R53	
BT-64	+++	0..1	Tax representative address line 1	The main address line in an address.	Usually the street name and number or the post office box.	R53	Text
BT-65	+++	0..1	Tax representative address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		R53	Text
BT-164	+++	0..1	Tax representative address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		R53	Text
BT-66	+++	0..1	Tax representative city	The common name of the city, town or village, where the tax representative address is located.		R53	Text
BT-67	+++	0..1	Tax representative post code	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	R53	Text
BT-68	+++	0..1	Tax representative country subdivision	The subdivision of a country.	Such as a region, a county, a state, a province, etc.	R53	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-69	+++	1..1	Tax representative country code	A code that identifies the country.	Country where VAT is liable. The lists of valid countries are registered with the EN ISO 3166-1 Maintenance agency, "Codes for the representation of names of countries and their subdivisions".	R53	Code
BG-13	+	0..1	DELIVERY INFORMATION	A group of business terms providing information about where and when the goods and services invoiced are delivered.		R31, R32, R57	
BT-70	++	0..1	Deliver to party name	The name of the party to which the goods and services are delivered.	Shall be used if the Deliver to party is different from the Buyer.	R57	Text
BT-71	++	0..1	Deliver to location identifier	An identifier for the location at which the goods and services are delivered.	If no scheme is specified, it should be known by Buyer and Seller, e.g. a previously exchanged Buyer or Seller assigned identifier.	R32	Identifier
BT-72	++	0..1	Actual delivery date	The identification scheme identifier of the Deliver to location identifier. the date on which the supply of goods or services was made or completed.	If used, the identification scheme shall be chosen from the entries of the list published by the ISO/IEC 6523 maintenance agency.	R31	Date
BG-14	++	0..1	INVOICING PERIOD	A group of business terms providing information on the invoice period.	Used to indicate when the period covered by the invoice starts and when it ends. Also called delivery period.	R34	
BT-73	+++	0..1	Invoicing period start date	The date when the Invoice period starts.	The initial date of delivery of goods or services.	R34	Date
BT-74	+++	0..1	Invoicing period end date	The date when the Invoice period ends.	The date on which the delivery of goods or services was completed.	R34	Date

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BG-15	++	0..1	DELIVER TO ADDRESS	A group of business terms providing information about the address to which goods and services invoiced were or are delivered.	In the case of pick-up, the deliver to address is the pick-up address. Sufficient components of the address are to be filled to comply with legal requirements.	R32	
BT-75	+++	0..1	Deliver to address line 1	The main address line in an address.	Usually the street name and number.	R32	Text
BT-76	+++	0..1	Deliver to address line 2	An additional address line in an address that can be used to give further details supplementing the main line.		R32	Text
BT-165	+++	0..1	Deliver to address line 3	An additional address line in an address that can be used to give further details supplementing the main line.		R32	Text
BT-77	+++	0..1	Deliver to city	The common name of the city, town or village, where the deliver to address is located.		R32	Text
BT-78	+++	0..1	Deliver to post code	The identifier for an addressable group of properties according to the relevant postal service.	Such as a ZIP code or a post code.	R32	Text
BT-79	+++	0..1	Deliver to country subdivision	The subdivision of a country.	Such as a region, a county, a state, a province, etc.	R32	Text
BT-80	+++	1..1	Deliver to country code	A code that identifies the country.	The lists of valid countries are registered with the EN ISO 3166-1 Maintenance agency, "Codes for the representation of names of countries and their subdivisions".	R32	Code
BG-16	+	0..1	PAYMENT INSTRUCTIONS	A group of business terms providing information about the payment.		R58	

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-81	++	1..1	Payment means type code	The means, expressed as code, for how a payment is expected to be or has been settled.	Entries from the UNTDID 4461 code list [6] shall be used. Distinction should be made between SEPA and non-SEPA payments, and between credit payments, direct debits, card payments and other instruments.	R58	Code
BT-82	++	0..1	Payment means text	The means, expressed as text, for how a payment is expected to be or has been settled.	Such as cash, credit transfer, direct debit, credit card, etc.	R58	Text
BT-83	++	0..1	Remittance information	A textual value used to establish a link between the payment and the Invoice, issued by the Seller.	Used for creditor's critical reconciliation information. This information element helps the Seller to assign an incoming payment to the relevant payment process. When specifying the textual value, which is commonly the invoice number of the invoice being paid, but may be another seller reference, the buyer should indicate this reference in his payment order when executing the payment. In a payment transaction this reference is transferred back to the Seller as Remittance Information.	R56, R62	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BG-17	++	0..n	CREDIT TRANSFER	A group of business terms to specify credit transfer payments.	<p>In order to allow for automatic processing of cross-border SEPA payments, only Latin characters should be used in this field, with a maximum of 140 characters. Reference section 1.4 of the SEPA credit transfer and SEPA direct debit scheme implementation guides [13] and [14] for details of the allowed characters. Other rules may apply for SEPA payments within national borders.</p> <p>If remittance information is structured according to the ISO 11649:2009 standard [16] for Structured RF Creditor Reference, it shall be mapped to the Structured Remittance Information Creditor Reference field in SEPA payments messages.</p> <p>If remittance information is structured according to the EACT standard for automated reconciliation [17], it shall be mapped to the Unstructured Remittance Information field in SEPA payments messages."</p> <p>If remittance information is to be mapped to the End To End Identification field or to the Structured Remittance Information Creditor Reference field in SEPA payments messages, then in addition to the Latin character set restriction, the content shall not start or end with a '/' and the content shall not contain '//'. See reference [15].</p>	R58	

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-84	+++	1..1	Payment account identifier	A unique identifier of the financial payment account, at a payment service provider, to which payment should be made.	Such as IBAN (in case of a SEPA payment) or a national account number.	R61, R65	Identifier
BT-85	+++	0..1	Payment account name	The name of the payment account, at a payment service provider, to which payment should be made.		R61, R65	Text
BT-86	+++	0..1	Payment service provider identifier	An identifier for the payment service provider where a payment account is located.	Such as a BIC or a national clearing code where required. No identification scheme to be used.	R61, R65	Identifier
BG-18	++	0..1	PAYMENT CARD INFORMATION	A group of business terms providing information about card used for payment contemporaneous with invoice issuance.	Only used if the Buyer had opted to pay by using a payment card such as a credit or debit card.	R64	
BT-87	+++	1..1	Payment card primary account number	The Primary Account Number (PAN) of the card used for payment.	In accordance with card payments security standards an invoice should never include a full card primary account number. At the moment PCI Security Standards Council has defined that the first 6 digits and last 4 digits are the maximum number of digits to be shown.	R64	Text
BT-88	+++	0..1	Payment card holder name	The name of the payment card holder.		R64	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BG-19	++	0..1	DIRECT DEBIT	A group of business terms to specify a direct debit.	This group may be used to give prior notice in the invoice that payment will be made through a SEPA or other direct debit initiated by the Seller, in accordance with the rules of the SEPA or other direct debit scheme.	R69	
BT-89	+++	0..1	Mandate reference identifier	Unique identifier assigned by the Payee for referencing the direct debit mandate.	Used in order to pre-notify the Buyer of a SEPA direct debit.	R69	Identifier
BT-90	+++	0..1	Bank assigned creditor identifier	Unique banking reference identifier of the Payee or Seller assigned by the Payee or Seller bank.	Used in order to pre-notify the Buyer of a SEPA direct debit.	R69	Identifier
BT-91	+++	0..1	Debited account identifier	The account to be debited by the direct debit.		R69	Identifier
BG-20	+	0..n	DOCUMENT LEVEL ALLOWANCES	A group of business terms providing information about allowances applicable to the Invoice as a whole.	Deductions, such as withheld tax may also be specified in this group.	R15	
BT-92	++	1..1	Document level allowance amount	The amount of an allowance, without VAT.		R15, R19	Amount
BT-93	++	0..1	Document level allowance base amount	The base amount that may be used, in conjunction with the document level allowance percentage, to calculate the document level allowance amount.		R15, R42	Amount
BT-94	++	0..1	Document level allowance percentage	The percentage that may be used, in conjunction with the document level allowance base amount, to calculate the document level allowance amount.		R15, R42	Percentage

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-95	++	1..1	Document level allowance VAT category code	A coded identification of what VAT category applies to the document level allowance.	<p>The following entries of UNTDID 5305 [6] are used (further clarification between brackets):</p> <ul style="list-style-type: none"> <li>- Standard rate (Liable for VAT in a standard way)</li> <li>- Zero rated goods (Liable for VAT with a percentage rate of zero)</li> <li>- Exempt from tax (VAT/IGIC/IPSI)</li> <li>- VAT Reverse Charge (Reverse charge VAT/IGIC/IPSI rules apply)</li> <li>- VAT exempt for intra community supply of goods (VAT/IGIC/IPSI not levied due to Intra-community supply rules)</li> <li>- Free export item, tax not charged (VAT/IGIC/IPSI not levied due to export outside of the EU)</li> <li>- Services outside scope of tax (Sale is not subject to VAT/IGIC/IPSI)</li> <li>- Canary Islands General Indirect Tax (Liable for IGIC tax)</li> <li>- Liable for IPSI (Ceuta/Melilla tax)</li> </ul>	R15, R16, R45, R48	Code
BT-96	++	0..1	Document level allowance VAT rate	The VAT rate, represented as percentage that applies to the document level allowance.		R15, R16, R45, R48	Percentage
BT-97	++	0..1	Document level allowance reason	The reason for the document level allowance, expressed as text.		R15	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-98	++	0..1	Document level allowance reason code	The reason for the document level allowance, expressed as a code.	Use entries of the UNTDID 5189 code list [6]. The Document level allowance code and the Document level allowance reason shall indicate the same allowance reason.	R15	Code
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.		R15	
BT-99	++	1..1	Document level charge amount	The amount of a charge, without VAT.		R15, R16, R19	Amount
BT-100	++	0..1	Document level charge base amount	The base amount that may be used, in conjunction with the document level charge percentage, to calculate the document level charge amount.		R15, R16, R19	Amount
BT-101	++	0..1	Document level charge percentage	The percentage that may be used, in conjunction with the document level charge base amount, to calculate the document level charge amount.		R15, R16, R19	Percentage

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-102	++	1..1	Document level charge VAT category code	A coded identification of what VAT category applies to the document level charge.	<p>The following entries of UNTDID 5305 [6] are used (further clarification between brackets):</p> <ul style="list-style-type: none"> <li>- Standard rate (Liable for VAT in a standard way)</li> <li>- Zero rated goods (Liable for VAT with a percentage rate of zero)</li> <li>- Exempt from tax (VAT/IGIC/IPSI)</li> <li>- VAT Reverse Charge (Reverse charge VAT/IGIC/IPSI rules apply)</li> <li>- VAT exempt for intra community supply of goods (VAT/IGIC/IPSI not levied due to Intra-community supply rules)</li> <li>- Free export item, tax not charged (VAT/IGIC/IPSI not levied due to export outside of the EU)</li> <li>- Services outside scope of tax (Sale is not subject to VAT/IGIC/IPSI)</li> <li>- Canary Islands General Indirect Tax (Liable for IGIC tax)</li> <li>- Liable for IPSI (Ceuta/Melilla tax)</li> </ul>	R15, R45, R48	Code
BT-103	++	0..1	Document level charge VAT rate	The VAT rate, represented as percentage that applies to the document level charge.		R15, R45, R48	Percentage
BT-104	++	0..1	Document level charge reason	The reason for the document level charge, expressed as text.		R15, R16	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-105	++	0..1	Document level charge reason code	The reason for the document level charge, expressed as a code.	Use entries of the UNTDID 7161 code list [6]. The Document level charge reason code and the Document level charge reason shall indicate the same charge reason.	R15, R16	Code
BG-22	+	1..1	DOCUMENT TOTALS	A group of business terms providing the monetary totals for the Invoice.		R40	
BT-106	++	1..1	Sum of Invoice line net amount	Sum of all Invoice line net amounts in the Invoice.		R40	Amount
BT-107	++	0..1	Sum of allowances on document level	Sum of all allowances on document level in the Invoice.	Allowances on line level are included in the Invoice line net amount which is summed up into the Sum of Invoice line net amount.	R19, R40	Amount
BT-108	++	0..1	Sum of charges on document level	Sum of all charges on document level in the Invoice.	Charges on line level are included in the Invoice line net amount which is summed up into the Sum of Invoice line net amount.	R19, R40	Amount
BT-109	++	1..1	Invoice total amount without VAT	The total amount of the Invoice without VAT.	The Invoice total amount without VAT is the Sum of Invoice line net amount minus Sum of allowances on document level plus Sum of charges on document level.	R40	Amount
BT-110	++	0..1	Invoice total VAT amount	The total VAT amount for the Invoice.	The Invoice total VAT amount is the sum of all VAT category tax amounts.	R40, R49	Amount
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.	To be used when the VAT accounting currency (BT-6) differs from the Invoice currency code (BT-5) in accordance with article 230 of Directive 2006/112 / EC on VAT. The VAT amount in accounting currency is not used in the calculation of the Invoice totals.	R54	Amount
BT-112	++	1..1	Invoice total amount with VAT	The total amount of the Invoice with VAT.	The Invoice total amount with VAT is the Invoice total amount without VAT plus the Invoice total VAT amount.	R40, R67	Amount

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-113	++	0..1	Paid amount	The sum of amounts which have been paid in advance.	This amount is subtracted from the invoice total amount with VAT to calculate the amount due for payment.	R40, R66	Amount
BT-114	++	0..1	Rounding amount	The amount to be added to the invoice total to round the amount to be paid.		R40	Amount
BT-115	++	1..1	Amount due for payment	The outstanding amount that is requested to be paid.	This amount is the Invoice total amount with VAT minus the paid amount that has been paid in advance. The amount is zero in case of a fully paid Invoice. The amount may be negative; in that case the Seller owes the amount to the Buyer.	R40, R59, R68	Amount
BG-23	+	1..n	VAT BREAKDOWN	A group of business terms providing information about VAT breakdown by different categories, rates and exemption reasons		R38, R45, R47, R48, R49	
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).	The sum of invoice line net amount minus allowances plus charges on document level which are subject to a specific VAT category code and VAT category rate (if the VAT category rate is applicable).	R50	Amount
BT-117	++	1..1	VAT category tax amount	The total VAT amount for a given VAT category.	Calculated by multiplying the VAT category taxable amount with the VAT category rate for the relevant VAT category.	R49	Amount

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-118	++	1..1	VAT category code	Coded identification of a VAT category.	<p>The following entries of UNTDID 5305 [6] are used (further clarification between brackets):</p> <ul style="list-style-type: none"> <li>- Standard rate (Liable for VAT in a standard way)</li> <li>- Zero rated goods (Liable for VAT with a percentage rate of zero)</li> <li>- Exempt from tax (VAT/IGIC/IPSi)</li> <li>- VAT Reverse Charge (Reverse charge VAT/IGIC/IPSi rules apply)</li> <li>- VAT exempt for intra community supply of goods (VAT/IGIC/IPSi not levied due to Intra-community supply rules)</li> <li>- Free export item, tax not charged (VAT/IGIC/IPSi not levied due to export outside of the EU)</li> <li>- Services outside scope of tax (Sale is not subject to VAT/IGIC/IPSi)</li> <li>- Canary Islands General Indirect Tax (Liable for IGIC tax)</li> <li>- Liable for IPSi (Ceuta/Melilla tax)</li> </ul>	R38, R45, R49	Code
BT-119	++	0..1	VAT category rate	The VAT rate, represented as percentage that applies for the relevant VAT category.	The VAT category code and the VAT category rate shall be consistent.	R38, R49	Percentage
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	Articles 226 items 11 to 15 Directive 2006/112/EC [2].	R48, R49, R51	Text
BT-121	++	0..1	VAT exemption reason code	A coded statement of the reason for why the amount is exempted from VAT.	Code list issued and maintained by the Connecting Europe Facility.	R48, R49, R51, R55	Code

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
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.	The additional supporting documents can be used for both referencing a document number which is expected to be known by the receiver, an external document (referenced by a URL) or as an embedded document (such as a time report in pdf). The option to link to an external document will be needed, for example in the case of large attachments and/or when sensitive information, e.g. person-related services, has to be separated from the Invoice itself.	R36	
BT-122	++	1..1	Supporting document reference	An identifier of the supporting document.		R36	Document reference
BT-123	++	0..1	Supporting document description	A description of the supporting document.	Such as: timesheet, usage report etc.	R36	Text
BT-124	++	0..1	External document location	The URL (Uniform Resource Locator) that identifies where the external document is located.	A means of locating the resource including its primary access mechanism, e.g. http:// or ftp://. External document location shall be used if the Buyer requires additional information to support the Invoice. External documents do not form part of the invoice. Risks can be involved when accessing external documents.	R36	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-125	++	0..1	Attached document	An attached document embedded as binary object or sent together with the invoice.	Attached document is used when documentation shall be stored with the Invoice for future reference or audit purposes.  Allowed mime codes: - application/pdf - image/png - image/jpeg - text/csv - application/vnd.openxmlformats-officedocument.spreadsheetml.sheet - application/vnd.oasis.opendocument.spreadsheet	R35	Binary object
BG-25	+	1..1	Attached document Mime code	The mime code of the attached document.		R17 R23 R27	
BT-126	++	1..1	Invoice line identifier	The file name of the attached document		R44	Identifier
BT-127	++	0..1	Invoice line note	A group of business terms providing information on individual Invoice lines.  A unique identifier for the individual line within the Invoice.  A textual note that gives unstructured information that is relevant to the Invoice line.		R28	Text
BT-128	++	0..1	Invoice line object identifier	An identifier for an object on which the invoice line is based, given by the Seller.		R33	Identifier

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
		0..1	Scheme identifier	The identification scheme identifier of the Invoice line object identifier.	If it may be not clear for the receiver what scheme is used for the identifier, a conditional scheme identifier should be used that shall be chosen from the UNTDID 1153 code list [6] entries.		
BT-129	++	1..1	Invoiced quantity	The quantity of items (goods or services) that is charged in the Invoice line.		R39, R56	Quantity
BT-130	++	1..1	Invoiced quantity unit of measure code	The unit of measure that applies to the invoiced quantity.	The unit of measure shall be chosen from the lists in UN/ECE Recommendation N° . 20 “Codes for Units of Measure Used in International Trade” [7] and UN/ECE Recommendation N° 21 “Codes for Passengers, Types of Cargo, Packages and Packaging Materials (with Complementary Codes for Package Names)” [19] applying the method described in UN/ECE Rec N° 20 Intro 2.a). Note that in most cases it is not needed for Buyers and Sellers to implement these lists fully in their software. Sellers need only to support the units needed for their goods and services; Buyers only need to verify that the units used in the Invoice are equal to the units used in other documents (such as Contract, Catalogue, Order and Despatch advice).	R14, R39	Code
BT-131	++	1..1	Invoice line net amount	The total amount of the Invoice line.	The amount is “net” without VAT, i.e. inclusive of line level allowances and charges as well as other relevant taxes.	R39, R40, R56	Amount

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-132	++	0..1	Referenced purchase order line reference	An identifier for a referenced line within a purchase order, issued by the Buyer.	The purchase order identifier is referenced on document level.	R6	Document reference
BT-133	++	0..1	Invoice line Buyer accounting reference	A textual value that specifies where to book the relevant data into the Buyer's financial accounts.	If required, this reference shall be provided by the Buyer to the Seller prior to the issuing of the Invoice.	R3	Text
BG-26	++	0..1	INVOICE LINE PERIOD	A group of business terms providing information about the period relevant for the Invoice line.	Is also called Invoice line delivery period.	R30	
BT-134	+++	0..1	Invoice line period start date	The date when the Invoice period for this Invoice line starts.	The date is the first day of the period.	R30	Date
BT-135	+++	0..1	Invoice line period end date	The date when the Invoice period for this Invoice line ends.	The date is the last day of the period.	R30	Date
BG-27	++	0..n	INVOICE LINE ALLOWANCES	A group of business terms providing information about allowances applicable to the individual Invoice line.		R15	
BT-136	+++	1..1	Invoice line allowance amount	The amount of an allowance, without VAT.		R15, R19	Amount
BT-137	+++	0..1	Invoice line allowance base amount	The base amount that may be used, in conjunction with the Invoice line allowance percentage, to calculate the Invoice line allowance amount.		R15, R42	Amount
BT-138	+++	0..1	Invoice line allowance percentage	The percentage that may be used, in conjunction with the Invoice line allowance base amount, to calculate the Invoice line allowance amount.		R15, R42	Percentage
BT-139	+++	0..1	Invoice line allowance reason	The reason for the Invoice line allowance, expressed as text.		R15	Text

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-140	+++	0..1	Invoice line allowance reason code	The reason for the Invoice line allowance, expressed as a code.	Use entries of the UNTDID 5189 code list [6]. The Invoice line level allowance reason code and the Invoice line level allowance reason shall indicate the same allowance reason.	R15	Code
BG-28	++	0..n	INVOICE LINE CHARGES	A group of business terms providing information about charges and taxes other than VAT applicable to the individual Invoice line.	All charges and taxes are assumed to be liable to the same VAT rate as the Invoice line.	R18	
BT-141	+++	1..1	Invoice line charge amount	The amount of a charge, without VAT.		R19	Amount
BT-142	+++	0..1	Invoice line charge base amount	The base amount that may be used, in conjunction with the Invoice line charge percentage, to calculate the Invoice line charge amount.		R42	Amount
BT-143	+++	0..1	Invoice line charge percentage	The percentage that may be used, in conjunction with the Invoice line charge base amount, to calculate the Invoice line charge amount.		R42	Percentage
BT-144	+++	0..1	Invoice line charge reason	The reason for the Invoice line charge, expressed as text.		R18	Text
BT-145	+++	0..1	Invoice line charge reason code	The reason for the Invoice line charge, expressed as a code.	Use entries of the UNTDID 7161 code list [6]. The Invoice line charge reason code and the Invoice line charge reason shall indicate the same charge reason.	R18	Code

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
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.		R14	
BT-146	+++	1..1	Item net price	The price of an item, exclusive of VAT, after subtracting item price discount.	The Item net price has to be equal with the Item gross price less the Item price discount.	R14	Unit price amount
BT-147	+++	0..1	Item price discount	The total discount subtracted from the Item gross price to calculate the Item net price.	Only applies if the discount is provided per unit and if it is not included in the Item gross price.	R14	Unit price amount
BT-148	+++	0..1	Item gross price	The unit price, exclusive of VAT, before subtracting Item price discount.		R14	Unit price amount
BT-149	+++	0..1	Item price base quantity	The number of item units to which the price applies.		R14	Quantity
BT-150	+++	0..1	Item price base quantity unit of measure code	The unit of measure that applies to the Item price base quantity.	The Item price base quantity unit of measure shall be the same as the Invoiced quantity unit of measure (BT-130).	R14	Code
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.		R45, R48	

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-151	+++	1..1	Invoiced item VAT category code	The VAT category code for the invoiced item.	<p>The following entries of UNTDID 5305 [6] are used (further clarification between brackets):</p> <ul style="list-style-type: none"> <li>- Standard rate (Liable for VAT in a standard way)</li> <li>- Zero rated goods (Liable for VAT with a percentage rate of zero)</li> <li>- Exempt from tax (VAT/IGIC/IPSI)</li> <li>- VAT Reverse Charge (Reverse charge VAT/IGIC/IPSI rules apply)</li> <li>- VAT exempt for intra community supply of goods (VAT/IGIC/IPSI not levied due to Intra-community supply rules)</li> <li>- Free export item, tax not charged (VAT/IGIC/IPSI not levied due to export outside of the EU)</li> <li>- Services outside scope of tax (Sale is not subject to VAT/IGIC/IPSI)</li> <li>- Canary Islands General Indirect Tax (Liable for IGIC tax)</li> <li>- Liable for IPSI (Ceuta/Melilla tax)</li> </ul>	R37, R45, R48, R55	Code
BT-152	+++	0..1	Invoiced item VAT rate	The VAT rate, represented as percentage that applies to the invoiced item.		R37, R45, R48	Percent
BG-31	++	1..1	ITEM INFORMATION	A group of business terms providing information about the goods and services invoiced.		R20, R56, R25, R26	

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BT-153	+++	1..1	Item name	A name for an item.		R20, R56	Text
BT-154	+++	0..1	Item description	A description for an item.	The Item description allows for describing the item and its features in more detail than the Item name.	R20, R56	Text
BT-155	+++	0..1	Item Seller's identifier	An identifier, assigned by the Seller, for the item.		R21, R56	Identifier
BT-156	+++	0..1	Item Buyer's identifier	An identifier, assigned by the Buyer, for the item.		R21, R56, R22	Identifier
BT-157	+++	0..1	Item standard identifier	An item identifier based on a registered scheme.		R23, R56	Identifier
		1..1	Scheme identifier	The identification scheme identifier of the Item standard identifier	The identification scheme shall be identified from the entries of the list published by the ISO/IEC 6523 maintenance agency.		
BT-158	+++	0..n	Item classification identifier	A code for classifying the item by its type or nature.	Classification codes are used to allow grouping of similar items for a various purposes e.g. public procurement (CPV), e-Commerce (UNSPSC) etc.	R24	Identifier
		1..1	Scheme identifier	The identification scheme identifier of the Item classification identifier	The identification scheme shall be chosen from the entries in UNTDID 7143 [6].		
		0..1	Scheme version identifier	The version of the identification scheme.			
BT-159	+++	0..1	Item country of origin	The code identifying the country from which the item originates.	The lists of valid countries are registered with the EN ISO 3166-1 Maintenance agency, "Codes for the representation of names of countries and their subdivisions".	R29	Code

ID	Level	Cardinality	Business Term	Description	Usage Note	Req. ID	Semantic data type <sup>3</sup>
BG-32	+++	0..n	ITEM ATTRIBUTES	A group of business terms providing information about properties of the goods and services invoiced.		R28	
BT-160	++++	1..1	Item attribute name	The name of the attribute or property of the item.	Such as "Colour".	R28	Text
BT-161	++++	1..1	Item attribute value	The value of the attribute or property of the item.	Such as "Red".	R28	Text

## 6.4 Business rules

### 6.4.1 Integrity constraints

**Table 3 — Business rules - Integrity constraints**

ID	Description	Target / context	Business term / group
BR-1	An Invoice shall have a Specification identifier (BT-24).	Process control	BT-24
BR-2	An Invoice shall have an Invoice number (BT-1).	Invoice	BT-1
BR-3	An Invoice shall have an Invoice issue date (BT-2).	Invoice	BT-2
BR-4	An Invoice shall have an Invoice type code (BT-3).	Invoice	BT-3
BR-5	An Invoice shall have an Invoice currency code (BT-5).	Invoice	BT-5
BR-6	An Invoice shall contain the Seller name (BT-27).	Seller	BT-27
BR-7	An Invoice shall contain the Buyer name (BT-44).	Buyer	BT-44
BR-8	An Invoice shall contain the Seller postal address (BG-5).	Seller	BG-5
BR-9	The Seller postal address (BG-5) shall contain a Seller country code (BT-40).	Seller Postal Address	BT-40
BR-10	An Invoice shall contain the Buyer postal address (BG-8).	Buyer	BG-8
BR-11	The Buyer postal address shall contain a Buyer country code (BT-55).	Buyer Postal Address	BT-55
BR-12	An Invoice shall have the Sum of Invoice line net amount (BT-106).	Document totals	BT-106
BR-13	An Invoice shall have the Invoice total amount without VAT (BT-109).	Document totals	BT-109
BR-14	An Invoice shall have the Invoice total amount with VAT (BT-112).	Document totals	BT-112
BR-15	An Invoice shall have the Amount due for payment (BT-115).	Document totals	BT-115
BR-16	An Invoice shall have at least one Invoice line (BG-25).	Invoice	BG-25
BR-17	The Payee name (BT-59) shall be provided in the Invoice, if the Payee (BG-10) is different from the Seller (BG-4).	Payee	BT-59
BR-18	The Seller tax representative name (BT-62) shall be provided in the Invoice, if the Seller (BG-4) has a Seller tax representative party (BG-11).	Seller tax representative	BT-62
BR-19	The Seller tax representative postal address (BG-12) shall be provided in the Invoice, if the Seller (BG-4) has a Seller tax representative party (BG-11).	Seller tax representative	BG-12

ID	Description	Target / context	Business term / group
BR-20	The Seller tax representative postal address (BG-12) shall contain a Tax representative country code (BT-69), if the Seller (BG-4) has a Seller tax representative party (BG-11).	Seller tax representative postal address	BT-69
BR-21	Each Invoice line (BG-25) shall have an Invoice line identifier (BT-126).	Invoice Line	BT-126
BR-22	Each Invoice line (BG-25) shall have an Invoiced quantity (BT-129).	Invoice Line	BT-129
BR-23	An Invoice line (BG-25) shall have an Invoiced quantity unit of measure code (BT-130).	Invoice Line	BT-130
BR-24	Each Invoice line (BG-25) shall have an Invoice line net amount (BT-131).	Invoice Line	BT-131
BR-25	Each Invoice line (BG-25) shall contain the Item name (BT-153).	Item information	BT-153
BR-26	Each Invoice line (BG-25) shall contain the Item net price (BT-146).	Price details	BT-146
BR-27	The Item net price (BT-146) shall NOT be negative.	Item net price	BT-146
BR-28	The Item gross price (BT-148) shall NOT be negative.	Price details	BT-148
BR-29	If both Invoicing period start date (BT-73) and Invoicing period end date (BT-74) are given then the Invoicing period end date (BT-74) shall be later or equal to the Invoicing period start date (BT-73).	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).	Invoice Line Period	BT-135
BR-31	Each Document level allowance (BG-20) shall have a Document level allowance amount (BT-92).	Document level allowances	BT-92
BR-32	Each Document level allowance (BG-20) shall have a Document level allowance VAT category code (BT-95).	Document level allowances	BT-95
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).	Document level allowances	BT-97, BT-98
BR-36	Each Document level charge (BG-21) shall have a Document level charge amount (BT-99).	Document level charges	BT-99

ID	Description	Target / context	Business term / group
BR-37	Each Document level charge (BG-21) shall have a Document level charge VAT category code (BT-102).	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).	Document level charges	BT-104, BT-105
BR-41	Each Invoice line allowance (BG-27) shall have an Invoice line allowance amount (BT-136).	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).	Invoice line allowances	BT-144, BT-145
BR-43	Each Invoice line charge (BG-28) shall have an Invoice line charge amount (BT-141).	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).	Invoice line charges	BT-139, BT-140
BR-45	Each VAT breakdown (BG-23) shall have a VAT category taxable amount (BT-116).	VAT breakdown	BT-116
BR-46	Each VAT breakdown (BG-23) shall have a VAT category tax amount (BT-117).	VAT breakdown	BT-117
BR-47	Each VAT breakdown (BG-23) shall be defined through 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.	VAT breakdown	BT-119
BR-49	A Payment instruction (BG-16) shall specify the Payment means type code (BT-81).	Payment instructions	BT-81
BR-50	A Payment account identifier (BT-84) shall be present if Credit transfer (BG-16) information is provided 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.	Card information	BT-87
BR-52	Each Additional supporting document (BG-24) shall contain a Supporting document reference (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 (BT-111) shall be provided.	Document totals	BT-111

ID	Description	Target / context	Business term / group
BR-54	Each Item attribute (BG-32) shall contain an Item attribute name (BT-160) and an Item attribute value (BT-161).	Item attributes	BT-160, BT-161
BR-55	Each Preceding Invoice reference (BG-3) shall contain a Preceding Invoice reference (BT-25).	Preceding invoice reference	BT-25
BR-56	Each Seller tax representative party (BG-11) shall have a Seller tax representative VAT identifier (BT-63).	Seller tax representative	BT-63
BR-57	Each Deliver to address (BG-15) shall contain a Deliver to country code (BT-80).	Deliver to address	BT-80
BR-61	If the Payment means type code (BT-81) means SEPA credit transfer, Local credit transfer or Non-SEPA international credit transfer, the Payment account identifier (BT-84) shall be present.	Payment instructions	BT-84
BR-62	The Seller electronic address (BT-34) shall have a Scheme identifier.	Seller electronic address	BT-34
BR-63	The Buyer electronic address (BT-49) shall have a Scheme identifier.	Buyer electronic address	BT-49
BR-64	The Item standard identifier (BT-157) shall have a Scheme identifier	Item standard identifier	BT-157
BR-65	The Item classification identifier (BT-158) shall have a Scheme identifier	Item classification identifier	BT-158

## 6.4.2 Conditions

**Table 4 — Business rules - Conditions**

ID	Description	Target / context	Business term / group
BR-CO-3	Value added tax point date (BT-7) and Value added tax point date code (BT-8) are mutually exclusive.	Invoice	BT-7, BT-8
BR-CO-4	Each Invoice line (BG-25) shall be categorized with an Invoiced item VAT category code (BT-151).	Invoice Line	BT-151
BR-CO-5	Document level allowance reason code (BT-98) and Document level allowance reason (BT-97) shall indicate the same type of allowance.	Document level Allowances	BT-97, BT-98

ID	Description	Target / context	Business term / group
BR-CO-6	Document level charge reason code (BT-105) and Document level charge reason (BT-104) shall indicate the same type of charge.	Document level Charges	BT-104, BT-105
BR-CO-7	Invoice line allowance reason code (BT-140) and Invoice line allowance reason (BT-139) shall indicate the same type of allowance reason.	Invoice line Allowances	BT-139, BT-140
BR-CO-8	Invoice line charge reason code (BT-145) and Invoice line charge reason (BT-144) shall indicate the same type of charge reason.	Invoice line Charges	BT-144, BT-145
BR-CO-9	The Seller VAT identifier (BT-31), the Seller tax representative VAT identifier (BT-63) 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
BR-CO-10	Sum of Invoice line net amount (BT-106) = $\sum$ Invoice line net amount (BT-131).	Document totals	BT-106
BR-CO-11	Sum of allowances on document level (BT-107) = $\sum$ Document level allowance amount (BT-92).	Document totals	BT-107
BR-CO-12	Sum of charges on document level (BT-108) = $\sum$ Document level charge amount (BT-99).	Document totals	BT-108
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).	Document totals	BT-109
BR-CO-14	Invoice total VAT amount (BT-110) = $\sum$ VAT category tax amount (BT-117).	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).	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).	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.	VAT breakdown	BT-117
BR-CO-18	An Invoice shall at least have one VAT breakdown group (BG-23).	VAT breakdown	BG-23
BR-CO-19	If Invoicing period (BG-14) is used, the Invoicing period start date (BT-73) or the Invoicing period end date (BT-74) shall be filled, or both.	Delivery or invoice period	BT-73, BT-74

ID	Description	Target / context	Business term / group
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
BR-CO-21	Each Document level allowance (BG-20) shall contain a Document level allowance reason (BT-97) or a Document level allowance reason code (BT-98), or both.	Document level allowance	BT-97, BT-98
BR-CO-22	Each Document level charge (BG-21) shall contain a Document level charge reason (BT-104) or a Document level charge reason code (BT-105), or both.	Document level charge	BT-104, BT-105
BR-CO-23	Each Invoice line allowance (BG-27) shall contain an Invoice line allowance reason (BT-139) or an Invoice line allowance reason code (BT-140), or both.	Invoice line allowance	BT-139, BT-140
BR-CO-24	Each Invoice line charge (BG-28) shall contain an Invoice line charge reason (BT-144) or an Invoice line charge reason code (BT-145), or both.	Invoice line charge	BT-144, BT-145
BR-CO-25	In case the Amount due for payment (BT-115) is positive, either the Payment due date (BT-9) or the Payment terms (BT-20) shall be present.	Invoice	BT-9, BT-20
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

### 6.4.3 VAT rules

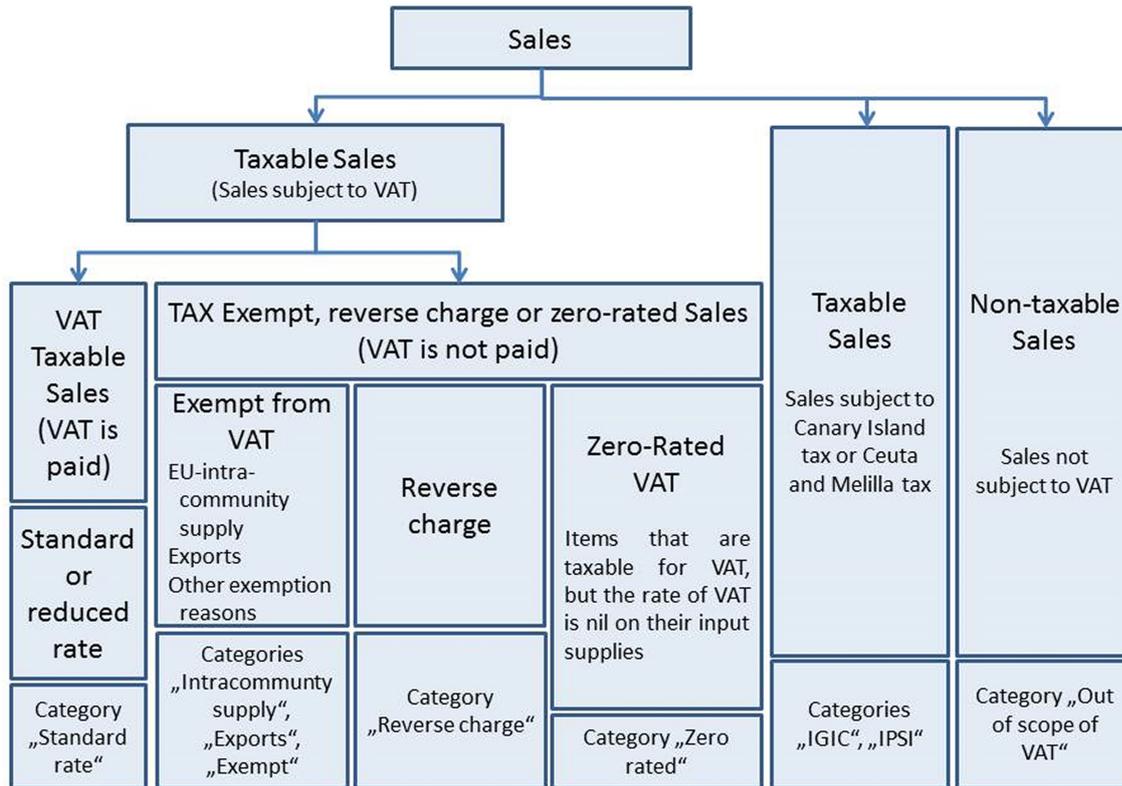
#### 6.4.3.1 Introduction

Value added tax (VAT) is an important requirement for Invoices within the European Union. The detailed requirements for VAT are governed by the European Directive VAT Council Directive 2006/112/EC of the 28th November 2006. The Directive has been adopted by member states into their respective national legislation. It should be noted that there may be variations due to legislation in each member state.

The Directive specifies who (taxable parties) and what (items and services) are liable for VAT; how the VAT is calculated; and what information shall be present in Invoices when VAT is charged in the Invoice.

The Directive also includes several exception use cases when VAT is not charged in an Invoice.

The diagram in Figure 16 illustrates a summary of the VAT Requirement Model. Different cases of VAT are identified as VAT categories and identified in a coded way. The definition of the category codes is given later in this document.



**Figure 16 — Summary of the VAT requirement model**

The required VAT information in an Invoice is dependent on the VAT case as detailed in 6.4.3.2 to 6.4.3.4.8. Below follows an explanation on how each VAT use case, illustrated in the diagram above, is treated in the Core Semantic Model.

**6.4.3.2 Specification of VAT category codes**

In the table below the meaning of each VAT category code (based on the UNTDID 5305 code list [6]) is explained.

**Table 5 — VAT categories**

Definition of category	Category
Standard VAT calculation	
Item is liable for VAT that is calculated in a standard way of applying the VAT percentage to the relevant taxable amount.	Standard rate
Item is liable for VAT that is calculated in a standard way of applying the VAT percentage to the relevant taxable amount, but the VAT percentage rate is 0 (zero).	Zero rated
VAT is not levied due to trade circumstances	
Item is exempt from VAT.	Exempt
The VAT tax is not levied to an item that is liable for VAT due to trade circumstances where the Reverse charge VAT rules apply.	Reverse charge
The VAT is not levied to an item that is liable for VAT due to trade circumstances where the rules on Intra-community supply apply.	Intra-community supply
The VAT is not levied to an item that is liable for VAT due to trade circumstances where the rules on export outside of the EU apply.	Export
Other VAT taxes apply	
Sale is subject to Canary Island (IGIC) tax.	IGIC
Sale is subject to Ceuta and Melilla (IPSI) tax.	IPSI
Not subject to VAT	
Sale is not subject to VAT.	Not subject to VAT

### 6.4.3.3 VAT is levied through the Invoice

#### 6.4.3.3.1 Standard rate and reduced rate items

For each sale, the VAT information shall be identified as follows:

- The VAT identifier of the Seller shall be stated in the Invoice;
- The VAT category code for the taxable amounts is given as Standard rate;
- The VAT category rate for the taxable amount is given as the relevant percentage rate;
- The VAT category taxable amount is the sum of Invoice line net amount minus the document level allowance amounts and plus the document level charge amounts;
- In the calculation of VAT the Invoice shall show a subtotal of the VAT taxable amount and the VAT tax amount for each VAT rate (i.e. each combination of the category code S and VAT tax rate on line level and for allowance and charges on document level).

## 6.4.3.3.2 Business rules statements

Table 6 — Business rules - VAT standard and reduced rate

ID	Description
BR-S-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 "Standard rated" shall contain in the VAT breakdown (BG-23) at least one VAT category code (BT-118) equal with "Standard rated".
BR-S-2	An Invoice that contains an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Standard rated" 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).
BR-S-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Standard rated" 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).
BR-S-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Standard rated" 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).
BR-S-5	In an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Standard rated" the Invoiced item VAT rate (BT-152) shall be greater than zero.
BR-S-6	In a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Standard rated" the Document level allowance VAT rate (BT-96) shall be greater than zero.
BR-S-7	In a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Standard rated" the Document level charge VAT rate (BT-103) shall be greater than zero.
BR-S-8	For each different value of VAT category rate (BT-119) where the VAT category code (BT-118) is "Standard rated", the VAT category taxable amount (BT-116) in a VAT breakdown (BG-23) shall equal the sum of Invoice line net amounts (BT-131) plus the sum of document level charge amounts (BT-99) minus the sum of document level allowance amounts (BT-92) where the VAT category code (BT-151, BT-102, BT-95) is "Standard rated" and the VAT rate (BT-152, BT-103, BT-96) equals the VAT category rate (BT-119).
BR-S-9	The VAT category tax amount (BT-117) in a VAT breakdown (BG-23) where VAT category code (BT-118) is "Standard rated" shall equal the VAT category taxable amount (BT-116) multiplied by the VAT category rate (BT-119).
BR-S-10	A VAT Breakdown (BG-23) with VAT Category code (BT-118) "Standard rate" shall not have a VAT exemption reason code (BT-121) or VAT exemption reason text (BT-120).

### 6.4.3.4 VAT is not levied through the Invoice

#### 6.4.3.4.1 Zero rated sale

While sale which is rated zero does not attract a VAT charge, there is, however, a requirement to state that the sale is zero rated. For each sale, recorded at Invoice line as well as document level allowances and charges the VAT shall be identified as follows.

- The VAT identifier of the Seller shall be stated in the Invoice;
- The VAT category code for the line is given as Zero rated sale;
- The VAT tax rate for the line is given as 0 percentage (zero);
- The taxable amount is the line amount;
- In the calculation of VAT, the Invoice shall show the amount taxed as zero rated as a subtotal of line amounts for lines that have VAT category code Zero rated sale;
- In the calculation of VAT, the Invoice shall show on document level the VAT charged as zero rated as the taxable amount multiplied by the percentage rate. Since by definition the rate is 0 % the VAT amount shall be zero.

#### 6.4.3.4.2 Business rules statements

**Table 7 — Business rules - VAT zero rate**

ID	Description
BR-Z-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 "Zero rated" shall contain in the VAT breakdown (BG-23) exactly one VAT category code (BT-118) equal with "Zero rated".
BR-Z-2	An Invoice that contains an Invoice line where the Invoiced item VAT category code (BT-151) is "Zero rated" 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).
BR-Z-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Zero rated" 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).
BR-Z-4	An Invoice that contains a Document level charge where the Document level charge VAT category code (BT-102) is "Zero rated" 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).
BR-Z-5	In an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Zero rated" the Invoiced item VAT rate (BT-152) shall be 0 (zero).
BR-Z-6	In a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Zero rated" the Document level allowance VAT rate (BT-96) shall be 0 (zero).
BR-Z-7	In a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Zero rated" the Document level charge VAT rate (BT-103) shall be 0 (zero).

ID	Description
BR-Z-8	In a VAT breakdown (BG-23) where VAT category code (BT-118) is "Zero rated" the VAT category taxable amount (BT-116) shall equal the sum of Invoice line net amount (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 "Zero rated".
BR-Z-9	The VAT category tax amount (BT-117) in a VAT breakdown (BG-23) where VAT category code (BT-118) is "Zero rated" shall equal 0 (zero).
BR-Z-10	A VAT Breakdown (BG-23) with VAT Category code (BT-118) "Zero rated" shall not have a VAT exemption reason code (BT-121) or VAT exemption reason text (BT-120).

#### 6.4.3.4.3 Exempted from VAT

As shown in the diagram above there are situations where sales are exempted from VAT. These are cases where VAT is not levied in the Invoice.

Sales may be exempt from VAT due to various reasons in accordance to EU directives and/or national legislation. When sales are exempt from VAT for various general reasons the following information shall be given:

- the VAT identifier of the Seller shall be stated in the Invoice;
- the VAT tax category code for the line is given as Exempted from VAT;
- the VAT tax rate for each line is given as 0 (zero);
- free text description of the reason for exemption shall be given for each exempted Invoice line;
- free text description of the reason for exemption shall be given in the VAT breakdown;
- in the calculation of VAT the Invoice shall show the amount taxed for each exemption reason as a subtotal of line amounts for lines that have identical combination of the category code Exempted from VAT and exemption reason text;
- in the calculation of VAT the Invoice shall on document level show the VAT charged as zero rated as the taxable amount multiplied by the percentage rate. Since by definition the rate is 0 % the VAT amount shall be zero.

Business rules statements

**Table 8 — Business rules - Exempted from VAT**

ID	Description
BR-E-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 "Exempt from VAT" shall contain exactly one VAT breakdown (BG-23) with the VAT category code (BT-118) equal to "Exempt from VAT".
BR-E-2	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).
BR-E-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) 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).
BR-E-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) 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).
BR-E-5	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).
BR-E-6	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).
BR-E-7	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).
BR-E-8	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 (BT-151, BT-95, BT-102) are "Exempt from VAT".
BR-E-9	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).
BR-E-10	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).

#### 6.4.3.4.4 Reverse Charge

When VAT is not levied in an Invoice due to Reverse Charge the following data are applied in the Invoice. As both the Seller and the Buyer have an agreement to apply the reverse charge, both the Buyer and Seller shall be registered for VAT and the VAT registration numbers of both the Buyer and Seller shall be detailed in the Invoice.

Where reverse charging applies, both the Buyer and Seller shall be registered for VAT, the VAT registration numbers of both the Buyer and Seller shall be detailed in the Invoice, and the statement "reverse charge" shall be present in the invoice. An issuer of an Invoice is required to indicate when an

Invoice line is a reverse charge. In the Invoice this is done by using the VAT category code for Reverse charge from code list subset of UN/TDID 5305 in relevant Invoice line.

In the electronic Invoice existence of the code for Reverse charge constitutes a declaration that the Invoice line is a reverse charge but to comply with regulation the text "Reverse charge" shall also appear in the Exemption reason text.

The following information is given at the document level:

- the VAT identifier of the Seller;
- the VAT identifier of the Buyer;
- the text "Reverse charge" is given for the VAT exemption reason text in the VAT breakdown (Or the equivalent standard text in other languages).

The following information shall be given on line level.

- the Invoiced item VAT category code for the line is given as Reverse charge;
- the Invoiced item VAT rate for the line is given as 0 (zero);
- the text "Reverse charge" is given for the invoiced item VAT exemption reason text (or the equivalent standard text in other languages).

It is the responsibility of the Seller to Invoice as reverse charge when appropriate. The following rules do not verify if that decision is correct. They only check whether the information is correctly stated in the Invoice instance.

Business rules statements

**Table 9 — Business rules - VAT reverse charge**

ID	Description
BR-AE-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 "Reverse charge" shall contain in the VAT breakdown (BG-23) exactly one VAT category code (BT-118) equal with "VAT reverse charge".
BR-AE-2	An Invoice that contains an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Reverse charge" 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) and the Buyer VAT identifier (BT-48) and/or the Buyer legal registration identifier (BT-47).
BR-AE-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Reverse charge" 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) and the Buyer VAT identifier (BT-48) and/or the Buyer legal registration identifier (BT-47).
BR-AE-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Reverse charge" 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) and the Buyer VAT identifier (BT-48) and/or the Buyer legal registration identifier (BT-47).

ID	Description
BR-AE-5	In an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Reverse charge" the Invoiced item VAT rate (BT-152) shall be 0 (zero).
BR-AE-6	In a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Reverse charge" the Document level allowance VAT rate (BT-96) shall be 0 (zero).
BR-AE-7	In a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Reverse charge" the Document level charge VAT rate (BT-103) shall be 0 (zero).
BR-AE-8	In a VAT breakdown (BG-23) where the VAT category code (BT-118) is "Reverse charge" 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 "Reverse charge".
BR-AE-9	The VAT category tax amount (BT-117) in a VAT breakdown (BG-23) where the VAT category code (BT-118) is "Reverse charge" shall be 0 (zero).
BR-AE-10	A VAT Breakdown (BG-23) with VAT Category code (BT-118) "Reverse charge" shall have a VAT exemption reason code (BT-121), meaning "Reverse charge" or the VAT exemption reason text (BT-120) "Reverse charge" (or the equivalent standard text in another language).

#### 6.4.3.4.5 Intra-Community Supply

When VAT is not levied in an Invoice due to Intra-Community Supply the following information is included in the Invoice. As both the Seller and the Buyer have an agreement to apply the intra-community supply, both the Buyer and Seller shall be registered for VAT and the VAT registration numbers of both the Buyer and Seller shall be detailed in the Invoice.

An issuer of an Invoice is required to indicate when an Invoice line is an intra-community supply. In the Invoice this is done by using the VAT tax category code for Intra-Community from code list subset of UN/TDID 5305 in relevant Invoice line.

In the electronic Invoice the existence of the code for Intra-community supply constitutes a declaration that the Invoice line is an intra-community supply but to comply with regulation, the text "Intra-community supply" shall also appear in the Exemption reason text.

The following information shall be given at the document level:

- the VAT identifier of the Seller;
- the VAT identifier of the Buyer;
- proof of delivery is required stating the following:
  - country of delivery
  - the date of delivery;
- the text "Intra-community supply" is given for the VAT exemption reason text in the VAT breakdown (or the equivalent standard text in other languages).

The following information shall be given on line level:

- the VAT tax category code for the line is given as Intra-community supply;
- the VAT tax rate for the line is given as 0 (zero);
- the text “Intra-community supply” in the invoiced item exemption reason text (or the equivalent standard text in other languages).

It is the responsibility of the Seller to Invoice as Intra-community Supply when appropriate. The following rules do not verify if that decision is correct. They only check whether the information is correctly stated in the Invoice instance.

#### Business rules statements

**Table 10 — Business rules - VAT intra-community supply**

ID	Description
BR-IC-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 “Intra-community supply” shall contain in the VAT breakdown (BG-23) exactly one VAT category code (BT-118) equal with "Intra-community supply".
BR-IC-2	An Invoice that contains an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is “Intra-community supply” shall contain the Seller VAT Identifier (BT-31) or the Seller tax representative VAT identifier (BT-63) and the Buyer VAT identifier (BT-48).
BR-IC-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is “Intra-community supply” shall contain the Seller VAT Identifier (BT-31) or the Seller tax representative VAT identifier (BT-63) and the Buyer VAT identifier (BT-48).
BR-IC-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is “Intra-community supply” shall contain the Seller VAT Identifier (BT-31) or the Seller tax representative VAT identifier (BT-63) and the Buyer VAT identifier (BT-48).
BR-IC-5	In an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Intra-community supply" the Invoiced item VAT rate (BT-152) shall be 0 (zero).
BR-IC-6	In a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Intra-community supply" the Document level allowance VAT rate (BT-96) shall be 0 (zero).
BR-IC-7	In a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Intra-community supply" the Document level charge VAT rate (BT-103) shall be 0 (zero).
BR-IC-8	In a VAT breakdown (BG-23) where the VAT category code (BT-118) is "Intra-community supply" 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 “Intra-community supply”.
BR-IC-9	The VAT category tax amount (BT-117) in a VAT breakdown (BG-23) where the VAT category code (BT-118) is “Intra-community supply” shall be 0 (zero).
BR-IC-10	A VAT Breakdown (BG-23) with the VAT Category code (BT-118) "Intra-community supply" shall have a VAT exemption reason code (BT-121), meaning "Intra-community

ID	Description
	supply" or the VAT exemption reason text (BT-120) "Intra-community supply" (or the equivalent standard text in another language).
BR-IC-11	In an Invoice with a VAT breakdown (BG-23) where the VAT category code (BT-118) is "Intra-community supply" the Actual delivery date (BT-72) or the Invoicing period (BG-14) shall not be blank.
BR-IC-12	In an Invoice with a VAT breakdown (BG-23) where the VAT category code (BT-118) is "Intra-community supply" the Deliver to country code (BT-80) shall not be blank.

#### 6.4.3.4.6 Exports

When VAT is not levied in an Invoice due to exports out of EU the following information is included in the Invoice.

An issuer of an Invoice is required to indicate when an Invoice line is export outside of EU. In the Invoice this is done by using the VAT tax category for Exports from code list subset of UN/TDID 5305 in the relevant Invoice line.

The following information shall be given at document level:

- the VAT identifier of the Seller;
- the text "Exports outside the EU" is given for the VAT exemption reason text in the VAT breakdown (or the equivalent standard text in other languages).

The following information shall be given on line level:

- the VAT tax category code for the line is given as Exports;
- the VAT tax rate for the line is given as 0 (zero);
- the text "Exports outside the EU" in the Invoice line exemption reason text (or the equivalent standard text in other languages).

It is the responsibility of the Seller to Invoice as exports when appropriate. The following rules do not verify if that decision is correct. They only check whether the information is correctly stated in the Invoice instance.

Business rules statements

**Table 11 — Business rules - VAT exports**

ID	Description
BR-G-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 "Export outside the EU" shall contain in the VAT breakdown (BG-23) exactly one VAT category code (BT-118) equal with "Export outside the EU".
BR-G-2	An Invoice that contains an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Export outside the EU" shall contain the Seller VAT Identifier (BT-31) or the Seller tax representative VAT identifier (BT-63).
BR-G-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Export outside the EU" shall contain the Seller VAT Identifier (BT-31) or the Seller tax representative VAT identifier (BT-63).
BR-G-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Export outside the EU" shall contain the Seller VAT Identifier (BT-31) or the Seller tax representative VAT identifier (BT-63).
BR-G-5	In an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "Export outside the EU" the Invoiced item VAT rate (BT-152) shall be 0 (zero).
BR-G-6	In a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "Export outside the EU" the Document level allowance VAT rate (BT-96) shall be 0 (zero).
BR-G-7	In a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "Export outside the EU" the Document level charge VAT rate (BT-103) shall be 0 (zero).
BR-G-8	In a VAT breakdown (BG-23) where the VAT category code (BT-118) is "Export outside the EU" 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 "Export outside the EU".
BR-G-9	The VAT category tax amount (BT-117) in a VAT breakdown (BG-23) where the VAT category code (BT-118) is "Export outside the EU" shall be 0 (zero).
BR-G-10	A VAT Breakdown (BG-23) with the VAT Category code (BT-118) "Export outside the EU" shall have a VAT exemption reason code (BT-121), meaning "Export outside the EU" or the VAT exemption reason text (BT-120) "Export outside the EU" (or the equivalent standard text in another language).

**6.4.3.4.7 Not subject to VAT**

When a sale is not subject to VAT, the entire Invoice shall not be subject to VAT .(Directive 2006/112/EC [2], article 16, second paragraph).

Business rules statements

**Table 12 — Business rules - Not subject to VAT**

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) <span style="border: 1px solid black; padding: 0 2px;">AC</span> or the Buyer VAT identifier (BT-48) <span style="border: 1px solid black; padding: 0 2px;">AC</span> .
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).
BR-O-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) 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-5	An Invoice line (BG-25) where the VAT category code (BT-151) is "Not subject to VAT" shall not contain an Invoiced item VAT rate (BT-152).
BR-O-6	A Document level allowance (BG-20) where VAT category code (BT-95) is "Not subject to VAT" shall not contain a Document level allowance VAT rate (BT-96).
BR-O-7	A Document level charge (BG-21) where the VAT category code (BT-102) is "Not subject to VAT" shall not contain a Document level charge VAT rate (BT-103).
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 have a VAT exemption reason code (BT-121), meaning "Not subject to VAT" or 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 (BT-118) "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 (BT-118) "Not subject to VAT" shall not contain an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is not "Not subject to VAT".
BR-O-13	An Invoice that contains a VAT breakdown group (BG-23) with a VAT category code (BT-118) "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 (BT-118) "Not subject to VAT" shall not contain Document level charges (BG-21) where

ID	Description
	Document level charge VAT category code (BT-102) is not "Not subject to VAT".

#### 6.4.3.4.8 Canary Islands, Ceuta and Melilla tax

In some European regions, taxes are applicable that are equivalent to VAT and need much the same processing. These taxes are in effect in the Canary Islands (IGIC) and in Ceuta and Melilla (IPSI). The following rules apply.

**Table 13 — Business rules - Canary Islands tax**

ID	Description
BR-IG-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 "IGIC" shall contain in the VAT breakdown (BG-23) at least one VAT category code (BT-118) equal with "IGIC".
BR-IG-2	An Invoice that contains an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "IGIC" 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).
BR-IG-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "IGIC" 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).
BR-IG-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "IGIC" 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).
BR-IG-5	In an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "IGIC" the invoiced item VAT rate (BT-152) shall be 0 (zero) or greater than zero.
BR-IG-6	In a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "IGIC" the Document level allowance VAT rate (BT-96) shall be 0 (zero) or greater than zero.
BR-IG-7	In a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "IGIC" the Document level charge VAT rate (BT-103) shall be 0 (zero) or greater than zero.
BR-IG-8	For each different value of VAT category rate (BT-119) where the VAT category code (BT-118) is "IGIC", the VAT category taxable amount (BT-116) in a VAT breakdown (BG-23) shall equal the sum of Invoice line net amounts (BT-131) plus the sum of document level charge amounts (BT-99) minus the sum of document level allowance amounts (BT-92) where the VAT category code (BT-151, BT-102, BT-95) is "IGIC" and the VAT rate (BT-152, BT-103, BT-96) equals the VAT category rate (BT-119).
BR-IG-9	The VAT category tax amount (BT-117) in a VAT breakdown (BG-23) where VAT category code (BT-118) is "IGIC" shall equal the VAT category taxable amount (BT-116) multiplied by the VAT category rate (BT-119).
BR-IG-10	A VAT Breakdown (BG-23) with VAT Category code (BT-118) "IGIC" shall not have a VAT exemption reason code (BT-121) or VAT exemption reason text (BT-120).

**Table 14 — Business rules - Ceuta and Melilla tax**

ID	Description
BR-IP-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 "IPSI" shall contain in the VAT breakdown (BG-23) at least one VAT category code (BT-118) equal with "IPSI".
BR-IP-2	An Invoice that contains an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "IPSI" 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).
BR-IP-3	An Invoice that contains a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "IPSI" 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).
BR-IP-4	An Invoice that contains a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "IPSI" 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).
BR-IP-5	In an Invoice line (BG-25) where the Invoiced item VAT category code (BT-151) is "IPSI" the Invoiced item VAT rate (BT-152) shall be 0 (zero) or greater than zero.
BR-IP-6	In a Document level allowance (BG-20) where the Document level allowance VAT category code (BT-95) is "IPSI" the Document level allowance VAT rate (BT-96) shall be 0 (zero) or greater than zero.
BR-IP-7	In a Document level charge (BG-21) where the Document level charge VAT category code (BT-102) is "IPSI" the Document level charge VAT rate (BT-103) shall be 0 (zero) or greater than zero.
BR-IP-8	For each different value of VAT category rate (BT-119) where the VAT category code (BT-118) is "IPSI", the VAT category taxable amount (BT-116) in a VAT breakdown (BG-23) shall equal the sum of Invoice line net amounts (BT-131) plus the sum of document level charge amounts (BT-99) minus the sum of document level allowance amounts (BT-92) where the VAT category code (BT-151, BT-102, BT-95) is "IPSI" and the VAT rate (BT-152, BT-103, BT-96) equals the VAT category rate (BT-119).
BR-IP-9	The VAT category tax amount (BT-117) in a VAT breakdown (BG-23) where VAT category code (BT-118) is "IPSI" shall equal the VAT category taxable amount (BT-116) multiplied by the VAT category rate (BT-119).
BR-IP-10	A VAT Breakdown (BG-23) with VAT Category code (BT-118) "IPSI" shall not have a VAT exemption reason code (BT-121) or VAT exemption reason text (BT-120).

## 6.5 Semantic data types

### 6.5.1 Introduction

Semantic data types are used to bridge the gap between the semantic concepts expressed by the information elements defined in the semantic model and their possible technical implementation. The semantic data types define the allowed value domain for the content, and any additional information components (attributes) needed in order to ensure its precise interpretation.

Semantic data type content may be of the following primitive types. These primitive types were taken from ISO 15000-5:2014, Annex B.

**Table 15 — Primitive types**

Primitive type	Definition
Binary	A set of finite-length sequences of binary digits.
Date	Time point representing a calendar day on a time scale consisting of an origin and a succession of calendar [ISO 8601:2004].
Decimal	A subset of the real numbers, which can be represented by decimal numerals.
String	A finite sequence of characters.

The semantic data types described in 6.5.2 to 6.5.13 are used in the semantic data model of the core elements of an electronic Invoice, where various features such as attributes, format and decimals as well as the basic type are defined for each semantic data type. They are based on ISO 15000-5. When used in an instance of an Invoice, each data element will contain data. In Tables 16 to 25 this is identified as the “content”. Whenever a business term is used in a core Invoice this term shall always have content and therefore the content is always mandatory.

### 6.5.2 Amount. Type

An amount states a numerical monetary value. The currency of the amount is defined as a separate business term. This EN 16931\_ Amount. Type<sup>4</sup> is based on the Amount. Type as defined in ISO 15000-5:2014, Annex B. EN 16931\_ Amount. Type is floating up to two fraction digits.

**Table 16 — Data type - Amount. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Decimal	10000.25

### 6.5.3 Unit Price Amount. Type

A unit price amount states a numerical monetary amount value for data elements that contain item prices that may be multiplied by item quantities. The currency of the amount is defined as a separate business term. This EN 16931\_ Unit Price\_ Amount. Type is based on the Amount. Type as defined in ISO 15000-5:2014, Annex B.

**Table 17 — Data type - Unit price amount. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Decimal	10000.1234

### 6.5.4 Quantity. Type

Quantities are used to state a number of units such as for items. The code for the Unit of Measure is defined as a separate business term. This EN 16931\_ Quantity. Type is based on the Quantity. Type as defined in ISO 15000-5:2014, Annex B.

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

**Table 18 — Data type - Quantity. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Decimal	10000.1234

### 6.5.5 Percentage. Type

Percentages are given as fractions of a hundred (per cent) e.g. the value 34,78 % in percentage terms is given as 34,78. This EN 16931\_Percentage\_Numeric\_Type is based on the Numeric\_Type as defined in ISO 15000-5:2014, Annex B.

**Table 19 — Data type - Percentage. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Decimal	<span style="border: 1px solid black; padding: 2px;">AC</span> 34.78 <span style="border: 1px solid black; padding: 2px;">AC</span>

### 6.5.6 Identifier. Type

Identifiers (IDs) are keys that are issued by the sender or recipient of a document or by a third party. For each identifier in the model it is stated whether an identification scheme or a scheme version ID may or shall be defined and if so, from what list the identification schemes may be chosen. This EN 16931\_Identifier\_Type is based on the Identifier\_Type as defined in ISO 15000-5:2014, Annex B. The Scheme identifier and the Scheme version ID identify the scheme on which the identifier is based.

The use of the attributes is specified for each information element in the semantic model.

**Table 20 — Data type - 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

### 6.5.7 Document Reference. Type

Identifiers that were assigned to a document or document line by the Buyer, the Seller or by a third party. This EN 16931\_Document Reference\_Identifier\_Type is based on the Identifier\_Type as defined in ISO 15000-5:2014, Annex B.

**Table 21 — Data type - Document Reference. Type**

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

### 6.5.8 Code. Type

Codes are used to specify allowed values in elements as well as for lists of options. Code is different from Identifier in that allowed values have standardized meanings that can be known by the recipient. This EN 16931\_Code\_Type is based on the Code\_Type as defined in ISO 15000-5:2014, Annex B.

The semantic model specifies the code list to be used for each coded business term. Codes shall be entered exactly as shown in the selected code list of the applicable syntax. The latest published version of the code lists (at the time of syntax binding) shall be used.

**Table 22 — Data type - Code. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	String	Abc123

### 6.5.9 Date. Type

Dates shall be in accordance to the “Calendar date complete representation” as specified by ISO 8601 (see ISO 8601:2004, 5.2.1.1). Calendar dates do not include a specification for the time of the day. This EN 16931\_ Date\_ Date Time. Type is based on the Date Time. Type as defined in ISO 15000-5:2014, Annex B. The content of the Date Time. Format. Text attribute is left to the syntax in which the Date is represented.

**Table 23 — Data type - Date. Type**

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

### 6.5.10 Text. Type

Text is the actual wording of anything written or printed. This EN 16931\_ Text. Type is based on the Text. Type as defined in ISO 15000-5:2014, Annex B. Line breaks in the text may be present.

**Table 24 — Data type - Text. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	String	“5% allowance when paid within 30 days”

### 6.5.11 Binary Object. Type

Binary objects can be used to describe files which are transmitted together with the Invoice.

Attachments shall be transmitted together with the Invoice. There shall be only one way defined per syntax. This EN 16931\_ Binary Object. Type is based on the Binary Object. Type as defined in ISO 15000-5:2014, Annex B. EN 16931\_ Binary Object. Type has two supplementary components: a Mime Code, which specifies the Mime type of the attachment and a Filename that is provided by (or on behalf of) the sender of the invoice.

**Table 25 — Data type - Binary Object. Type**

Component	Use	Primitive Type	Example
Content	Mandatory	Binary	
Mime Code	Mandatory	String	“image/jpeg”
Filename	Mandatory	String	“drawing5.jpg”

A Receiver of an Invoice, compliant to the core invoice model shall accept and process attachments that are of the following mime types (commonly used file extensions are added between brackets):

- application/pdf (.pdf);
- image/png (.png);

- image/jpeg (.jpg);
- text/csv (.csv);
- application/vnd.openxmlformats-officedocument.spreadsheetml.sheet (.xlsx);
- application/vnd.oasis.opendocument.spreadsheet (.ods).

Length limitations may apply. Guidance is given in the transmission guideline CEN/TR 16931-4.

### 6.5.12 Decimals

The allowed maximum number of decimals for the various business terms is specified in Table 26.

**Table 26 — Allowed number of decimals**

BT ID	Business term name	Allowed maximum number of decimals
BG-20	DOCUMENT LEVEL ALLOWANCES	
BT-92	Document level allowance amount	2
BT-93	Document level allowance base amount	2
BG-21	DOCUMENT LEVEL CHARGES	
BT-99	Document level charge amount	2
BT-100	Document level charge base amount	2
BG-22	DOCUMENT TOTALS	
BT-106	Sum of Invoice line net amount	2
BT-107	Sum of allowances on document level	2
BT-108	Sum of charges on document level	2
BT-109	Invoice total amount without VAT	2
BT-110	Invoice total VAT amount	2
BT-112	Invoice total amount with VAT	2
BT-111	Invoice total VAT amount in accounting currency	2
BT-113	Paid amount	2
BT-114	Rounding amount	2
BT-115	Amount due for payment	2
BG-23	VAT BREAKDOWN	
BT-116	VAT category taxable amount	2
BT-117	VAT category tax amount	2

BT ID	Business term name	Allowed maximum number of decimals
BG-25	INVOICE LINE	
BT-131	Invoice line net amount	2
BG-27	INVOICE LINE ALLOWANCES	
BT-136	Invoice line allowance amount	2
BT-137	Invoice line allowance base amount	2
BG-28	INVOICE LINE CHARGES	
BT-141	Invoice line charge amount	2
BT-142	Invoice line charge base amount	2

### 6.5.13 Rounding

Rules to minimize the risk of differences due to rounding as illustrated in the examples are:

- All document level totals shall be rounded to two decimals for accounting;
- Rounding shall be done on the final calculation results not on any intermediate results;
- VAT category tax amount (BT-110) shall be rounded on document level and not as a summation of rounded Invoice line VAT amounts.

## 7 Core Invoice Usage Specification

### 7.1 Introduction

A “Core Invoice Usage Specification” (CIUS) is a specification that provides a seller with detailed guidance, explanations and examples, as well as rules (business rules) related to the actual implementation and use of structured information elements present in the core invoice model in a specific trading situation. An instance document created following a given CIUS shall always be compliant with the European Standard (this document).

Typically, a CIUS will be created by a contracting entity (buyer) in relation to its own supply chain or by a group of contracting entities wishing to achieve consistency in the way that the information elements in the core invoice model are to be used by sellers trading with an identified sector or community of buyers. The requirements set out in such a CIUS will be communicated directly to sellers or placed on a website, and may be included or referred to in the contractual documentation between the parties. Alternatively, a CIUS may be created by a group of sellers and agreed in turn by their buyer or buyers in the context of a specific industry or supply chain. A CIUS is a set of usage guidelines and/or restrictions made to the core invoice model that will still produce an invoice instance that is fully compliant with the core invoice model. That means that a receiver of an invoice document instance that has been created according to a CIUS is still able to receive and process it in accordance with the rules defined for the core invoice model.

The main reasons for developing a CIUS include:

- A receiver wishes to specify the way conditional information elements in the core invoice model are used or to restrict the content of mandatory or conditional information elements to a narrower set of requirements;

- A sender may be required to support requirements that are relevant to the trading situation. As an example, the sender may have to always provide certain information elements, even though they are specified as conditional in the core invoice model;
- a receiver requests that certain conditional elements are always used to facilitate increased automation in his processing. Examples include specified use of information elements relating to the wide variety of reference data (purchase order, contract reference, tender identifier etc.) provided in the core invoice model;
- a sender may want to explain how he applies the core invoice model to his trading information;
- a single buyer or a national and/or sectorial body may want to explain how the core invoice model is applied to given use cases. Examples of such may include use of national payment methods, the use of credit notes/negative invoices, the use of code lists and identifiers, or the use of line items. They may also wish to use terminology and language that is familiar to the targeted user;
- Another application is to restrict the information elements to those that could be included in a user-friendly e-invoice for SMEs supplying basis goods and services.

It is clearly a matter of good practice to confine the issue of a CIUS to convey essential requirements and not to proliferate their use or complexity. They should be used sparingly for justified requirements to ensure a balance between the needs of both buyer and seller.

## 7.2 Compliance

See 4.4 for compliance rules for CIUSes.

## 7.3 What may be specified in a CIUS

### 7.3.1 Introduction

The reference point for any CIUS is always the core invoice model as defined in this document. The specification shall clearly state in what way it creates usage guidelines or restrictions within the core invoice model.

The core invoice model is defined through the following key parameters which may be subject to further levels of specificity in a CIUS.

**Business term:** Business terms are used to identify an individual information element or group of information elements contained in the semantic model, and that may be exchanged in an invoice instance document. The core invoice model defines a set of business terms. Some are mandatory for the sender to include in all invoice instance documents. Others are conditional. The receiver is responsible for processing relevant information according to its processes. A CIUS may reduce the list of conditional elements or further specify their definition.

**Cardinality:** For each business term the core invoice model defines if it shall and how often it may appear in the same invoice instance document by stating their cardinality. A CIUS may restrict this and consequently affect how the receiver shall or can process the invoice instance document.

**Semantic data type:** Each business term defined in the core invoice model also has a defined semantic data type for the data it may contain. The semantic data type affects how the data shall or may be processed, as well as how it should be interpreted. For example, calculations can only be carried out using numbers, so business terms that are used in calculations are of the semantic data type number. Parties may want to further restrict the value domain of a semantic data type.

**Codes and identifiers:** Codes and identifiers are based on a list of schemas that define their meaning (in the case of codes) or how they are issued and structured (in the case of identifiers). For business terms

that are defined as code or identifier the core invoice model specifies what code and identifier schemas may be used. In order to support specific requirements the trading partners may need to change these definitions.

**Business rules:** Many business terms in the core invoice model are governed by rules that control their use and content. Partner may need to change or add to these rules in order to meet specific business requirements.

**Value domain for an information element:** Only in few cases does the core invoice model define value domains or the format of the data. Trading partners may want to prescribe such rules where there are none or to restrict existing ones to support specific requirements. For example the core invoice model does in some cases restrict allowed values to non-negative. On the other hand it does not set restrictions on text lengths, which may be included in a CIUS.

7.3.2 lists in more detail the type of specification that can be made in a CIUS based on the core invoice model and set out in a bilateral agreement between the trading parties.

### 7.3.2 Allowed specifications in a CIUS

Trading parties may make the following specifications within the core invoice model and the resulting invoice instance will still be compliant with the core invoice model and as result a receiver can process the invoice without any modification to his processing. However, the recipient may choose to take advantage of the specifications defined in the CIUS to further streamline his invoice processing.

Type of change	Example/remark
Business Terms	
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 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.

Type of change	Example/remark
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.

#### 7.4 Documentation of core invoice usage specifications

A CIUS shall always be documented with clear reference to the core invoice model. It may be documented either as changes only, or as a full specification. If documented as a full specification, it shall be clear in what way the specification differs from its underlying specification and represents a further specification within the core invoice model.

Core invoice usage specifications should be documented in an appropriate repository for retrieval and sharing. The availability of such a repository is expected to foster convergence over time.

Agreement between Buyers and Sellers on using a core invoice usage specification should be part of the commercial contract between them.

## **7.5 Mapping to syntax**

A CIUS is implemented through a syntax and each specification may be mapped to one or more syntaxes.

For clarity and to avoid confusion the general rules should be that a CIUS should have the same “look and feel” and use identical notation and terminology as is used for the core invoice model itself.

Specifications and restrictions documented in a CIUS shall be mapped to the relevant syntax in accordance to the same syntax binding methodology as is used for the core invoice model -see CEN/TS 16931-3-1.

## **7.6 Identification of core invoice usage specifications**

For clear referencing and identification in processing each CIUS and its version shall be clearly identified and have an assigned identifier.

The invoice instance document itself should carry the assigned identifier in the business term “Specification identification”. This will allow the receiver of the invoice instance document to apply processing of the document in accordance with the rules under which it was generated.

## Annex A (informative)

### Examples

#### A.1 Calculation examples

##### A.1.1 Introduction

Calculation within an Invoice line is not enforced in the validation to allow trade parties flexibility in rounding and multiplications of quantities and net prices:

- Invoice line net amount = Item net price / Item price base quantity x Invoiced quantity +  $\sum$  Charge amount (same line) -  $\sum$  Allowance amount (same line), rounded “half up” to two decimals;
- If the Item price base quantity is not stated in an Invoice instance then it is assumed to be 1;
- Item net price = Item gross price - Item price discount.

The issuer of the Invoice may nevertheless expect the Buyer to verify quantities and prices against other relevant information such as contracts and orders and to possibly dispute the Invoice with a business level objection.

In the examples below the calculation of the Invoice elements are illustrated in different common scenarios.

##### A.1.2 Example 1 (Different Invoiced item VAT rates)

In this example 11 bottles of wine have been ordered. Five of the bottles are 12,00 EUR each exclusive of VAT. The VAT is 25 %. The other 6 bottles are 15,00 EUR each exclusive of VAT but invoiced as a case. The VAT rate is 12 %.

Invoice Lines:

Invoice line identifier	Item name	Invoiced quantity	Item net price	Invoiced quantity unit of measure	Invoiced item VAT category code	Invoiced item VAT rate	Invoice line net amount
1	Wine-bottles	5	12,00	Bottle	Standard rate	25	60.00
2	Wine-case of 6	1	90,00	Case	Standard rate	12	90.00

## Calculations:

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-25	INVOICE LINE 1		
BT-129	Invoiced quantity:	5	
BT-130	Invoiced quantity unit of measure:	Bottle	
BT-146	Item net price:	12,00	EUR
BT-149	Item price base quantity:	1	
BT-131	Invoice line net amount:	60,00	EUR, Invoiced quantity x (Item net price/Item price base quantity)
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%
BG-25	INVOICE LINE 2		
BT-129	Invoiced quantity:	1	
BT-130	Invoiced quantity unit of measure:	Case	
BT-146	Item net price:	90,00	EUR
BT-149	Item price base quantity:	1	
BT-131	Invoice line net amount:	90,00	EUR, Invoiced quantity x (Item net price/Item price base quantity)
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	12	%
BG-23	VAT BREAKDOWN		
BT-118	VAT category code:	Standard rate	
BT-119	VAT category rate:	25	%
BT-116	VAT category taxable amount:	60,00	EUR, Sum of "Invoice line net amount" (where "VAT Category code" AND "VAT category rate" matches line information) (see BR-S-8)
BT-117	VAT category tax amount:	15,00	EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded to two decimals. (See BR-CO-17).

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-23	VAT BREAKDOWN		
BT-118	VAT category code:	Standard rate	
BT-119	VAT category rate:	12 %	
BT-116	VAT category taxable amount:	90,00	EUR, Sum of "Invoice line net amount" (where "VAT Category code" AND "VAT category rate" matches line information) (see BR-S-8)
BT-117	VAT category tax amount:	10,80	EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded to two decimals. (See BR-CO-17)
BG-22	DOCUMENT TOTALS		
BT-106	Sum of Invoice line net amount:	150,00	EUR, Sum of "Invoice line net amount" (See BR-CO-10)
BT-109	Invoice total amount without VAT:	150,00	EUR, Sum of "Invoice line net amount" - Sum of allowances on document level + Sum of charges on document level (see BR-CO-13)
BT-110	Invoice total VAT amount:	25,80	EUR, Sum of "VAT category tax amount" (See BR-CO-14)
BT-112	Invoice total amount with VAT:	175,80	EUR, "Invoice total amount without VAT" + "Invoice total VAT amount" (see BR-CO-15)
BT-115	Amount due for payment:	175,80	EUR, "Invoice total VAT amount" - "Paid amount" + "Rounding amount" (see BR-CO-16)

### A.1.3 Example 2 (Item price base quantity)

In this example 10 000 screws are invoiced. Due to the low unit price they are invoiced per 1 000 pieces. The price for one screw is EUR 0,0045 exclusive of VAT. The VAT rate is 25 %.

Invoice Lines:

Invoice line identifier	Item name	Invoiced quantity	Item price net	Item price base quantity	Invoiced quantity unit of measure	Invoiced item VAT category code	Invoiced item VAT rate	Invoice line net amount
1	screw	10 000	4,50	1 000	Piece	Standard rate	25	45,00

## Calculations:

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-25	INVOICE LINE 1		
BT-129	Invoiced quantity:	10 000	Pieces
BT-130	Invoiced quantity unit of measure:	Piece	
BT-146	Item net price:	4,50	EUR
BT-149	Item price base quantity:	1 000	Pieces
BT-131	Invoice line net amount:	45,00	EUR, Invoiced quantity x (Item net price/Item price base quantity)
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%
BG-23	VAT BREAKDOWN		
BT-118	VAT category code:	Standard rate	
BT-119	VAT category rate:	25	%
BT-116	VAT category taxable amount:	45,00	EUR, Sum of "Invoice line net amount" (where "VAT Category code" AND "VAT category rate" matches line information) (See BR-S-8)
BT-117	VAT category tax amount:	11,25	EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded to two decimals. (See BR-CO-17)
BG-22	DOCUMENT TOTALS		
BT-106	Sum of Invoice line net amount:	45,00	EUR, Sum of "Invoice line net amount" (see BR-CO-10)
BT-109	Invoice total amount without VAT:	45,00	EUR, Sum of "Invoice line net amount" - Sum of allowances on document level + Sum of charges on document level (see BR-CO-13)
BT-110	Invoice total VAT amount:	11,25	EUR, Sum of "VAT category tax amount" (See BR-CO-14)
BT-112	Invoice total amount with VAT:	56,25	EUR, "Invoice total amount without VAT" + "Invoice total VAT amount" (see BR-CO-15)
BT-115	Amount due for payment:	56,25	EUR, "Invoice total VAT amount" - "Paid amount" (See BR-CO-16)

### A.1.4 Example 3 (Invoiced quantity unit of measure)

In this example one chicken has been ordered, but the Invoice is in kilograms. In the Invoice line both the quantity and the price refer to the same unit of measure and the relationship between the order unit and the Invoice unit is not explicit. The Item net price is 9,50 EUR exclusive of VAT including a 0,50 EUR discount. The VAT rate is 12,50 %.

Invoice Lines:

Invoice line identifier	Item name	Invoiced quantity	Item net price	Item price discount	Item gross price	Invoiced quantity unit of measure	Invoiced item VAT category code	Invoiced item VAT rate	Invoice line net amount
1	Chicken	1,3	9,50	0,50	10,00	Kilogram	Standard rate	12,50	12,35

Calculations:

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-25	INVOICE LINE 1		
BT-129	Invoiced quantity:	1,3	kg
BT-130	Invoiced quantity unit of measure:	Kilogram	
BT-146	Item net price:	9,50	EUR, Item gross price - Item price discount
BT-147	Item price discount:	0,50	EUR, Invoiced quantity x (Item net price/Item price base quantity)
BT-148	Item gross price:	10,00	EUR
BT-149	Item price base quantity:	1	kg
BT-131	Invoice line net amount:	12,35	EUR
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%
BG-23	VAT BREAKDOWN		
BT-118	VAT category code:	Standard rate	
BT-119	VAT category rate:	12,5	%
BT-116	VAT category taxable amount:	12,35	EUR, Sum of "Invoice line net amount" (where "VAT Category code" AND "VAT category rate" matches line information) (See BR-S-8)
BT-117	VAT category tax amount:	1,54	EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded to two decimals. (See BR-CO-17)

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-22	DOCUMENT TOTALS		
BT-106	Sum of Invoice line net amount:	12,35	EUR, Sum of "Invoice line net amount" (see BR-CO-10)
BT-109	Invoice total amount without VAT:	12,35	EUR, Sum of "Invoice line net amount" - Sum of allowances on document level + Sum of charges on document level (see BR-CO-13)
BT-110	Invoice total VAT amount:	1,54	EUR, Sum of "VAT category tax amount" (See BR-CO-14)
BT-112	Invoice total amount with VAT:	13,89	EUR, "Invoice total amount without VAT" + "Invoice total VAT amount" (see BR-CO-15)
BT-115	Amount due for payment:	13,89	EUR, "Invoice total VAT amount" - "Paid amount" (See BR-CO-16)

#### A.1.5 Example 4 (Discounts, allowances and charges)

In this example 25 cases of pens and 15 packs of paper have been ordered.

A case of pens is 8,50 EUR exclusive of VAT with a 1,00 EUR Price discount. The VAT rate is 25 %. A charge of 10,00 EUR is allocated to the pens.

A pack of paper is 4,50 EUR exclusive of VAT. The VAT rate is 25 %. An allowance of 5 % is allocated to the paper, equal to an allowance amount of 3,38 EUR (rounded from 3,375).

A VAT Zero Rated Freight Charge of 15,00 EUR and an allowance percentage on 10 % are allocated at document level. The document level allowance VAT rate is 25 %.

## Invoice Lines:

ID	Item name	Invoiced quantity	Item net price	Item price discount	Item gross price	Unit of measure	VAT category	Charges	Allowances	VAT rate	Invoice line net amount
1	Pens	25	8,50	1,00	9,50	Case	Standard rate	10,00		25	222,50
2	Paper	15	4,50			Pack	Standard rate		3,38	25	64,12

## Calculations:

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-25	INVOICE LINE 1		
BT-129	Invoiced quantity:	25	Cases
BT-130	Invoiced quantity unit of measure:	Case	
BT-146	Item net price:	8,50	EUR, (Item gross price - Item price discount)
BT-147	Item price discount:	1,00	EUR
BT-148	Item gross price:	9,50	EUR
BT-149	Item price base quantity:	1	Case
BT-142	Invoice line charge amount:	10,00	EUR
BT-131	Invoice line net amount:	222,50	EUR, Invoiced quantity x (Item net price/Item price base quantity)+ Invoice line charge amount)
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%
BG-25	INVOICE LINE 2		
BT-129	Invoiced quantity:	15	Packs
BT-130	Invoiced quantity unit of measure:	Pack	
BT-146	Item net price:	4,50	EUR
BT-149	Item price base quantity:	1	Pack
BT-138	Invoice line allowance percentage:	5	%
BT-137	Invoice line allowance base amount:	67,50	EUR
BT-136	Invoice line allowance amount:	3,38	EUR
BT-131	Invoice line net amount:	64,12	EUR, Invoiced quantity x (Item net price/Item price base quantity)-Invoice line allowance amount
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-20	DOCUMENT LEVEL ALLOWANCES		
BT-92	Document level allowance amount:	28,66	EUR, Document level allowance base amount x Document level allowance percentage) / 100, rounded to two decimals
BT-94	Document level allowance percentage:	10	%
BT-93	Document level allowance base amount:	286,62	EUR, Sum of Invoice line net amounts
BT-95	Document level allowance VAT category code:	Standard rate	
BT-96	Document level allowance VAT rate:	25	%
BT-97	Document level allowance reason:	Volume discount	
BG-21	DOCUMENT LEVEL CHARGES		
BT-99	Document level charge amount:	15,00	EUR
BT-102	Document level charge VAT category code:	Zero rated	
BT-103	Document level charge VAT rate:	0	%
BT-104	Document level charge reason:	Freight charge	
BG-23	VAT BREAKDOWN		
BT-118	VAT category code:	Standard rate	
BT-119	VAT category rate:	25	%
BT-116	VAT category taxable amount:	257,97	EUR, Sum of "Invoice line net amount" + sum of "Charge amount" - sum of "Allowance amount" (where "VAT Category code" AND "VAT category rate" matches line information) (See BR-S-8)
BT-117	VAT category tax amount:	64,49	EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded to two decimals. (See BR-CO-17)
BG-23	VAT BREAKDOWN		
BT-118	VAT category code:	Zero rated	
BT-119	VAT category rate:	0	%
BT-116	VAT category taxable amount:	0	EUR, Sum of "Invoice line net amount" + Sum of "Charge amount" - sum of "Allowance amount" (where "VAT Category code" AND "VAT category rate" matches line information) (See

BG/BT	Business Term Name	Value	Remarks / Calculation
BT-117	VAT category tax amount:	0	BR-Z-8) EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded to two decimals. (See BR-CO-17)
BG-22	DOCUMENT TOTALS		
BT-106	Sum of Invoice line net amount:	286,63	EUR, Sum of "Invoice line net amount" (see BR-CO-10)
BT-107	Sum of allowances on document level:	28,66	EUR
BT-108	Sum of charges on document level:	15	EUR
BT-109	Invoice total amount without VAT:	272,97	EUR, Sum of "Invoice line net amount" - Sum of allowances on document level + Sum of charges on document level (see BR-CO-13)
BT-110	Invoice total VAT amount:	64,49	EUR, Sum of "VAT category tax amount" (See BR-CO-14)
BT-112	Invoice total amount with VAT:	337,46	EUR, "Invoice total amount without VAT" + "Invoice total VAT amount" (see BR-CO-15)
BT-115	Amount due for payment:	337,46	EUR, "Invoice total VAT amount" - "Paid amount" (See BR-CO-16)

### A.1.6 Example 5 (Negative Invoice line)

In this example, 25 cases of pens have been ordered. Ten returned packages from an earlier wrong delivery are credited. A case of pens is EUR 8,50 excluded of VAT with a EUR 1,00 Price discount. The VAT rate is 25 %.

Invoice Lines:

Invoice line identifier	Item name	Invoiced quantity	Item net price	Item price discount	Item gross price	Invoiced quantity unit of measure	Invoiced item VAT category code	Invoiced item VAT rate	Invoice line net amount
1	Pens	25	8,50	1,00	9,50	Case	Standard rate	25	212,50
2	Pens	-10	8,50	1,00	9,50	Case	Standard rate	25	-85,00

## Calculations:

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-25	INVOICE LINE 1		
BT-129	Invoiced quantity:	25	Cases
BT-130	Invoiced quantity unit of measure:	Case	
BT-146	Item net price:	8,50	EUR, Item gross price – Item price discount
BT-147	Item price discount:	1,00	EUR
BT-148	Item gross price:	9,50	EUR
BT-149	Item price base quantity:	1	Case
BT-131	Invoice line net amount:	212,50	EUR, Invoiced quantity x (Item net price/Item price base quantity)
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%
BG-25	INVOICE LINE 2		
BT-129	Invoiced quantity:	-10	Cases
BT-130	Invoiced quantity unit of measure:	Case	
BT-146	Item net price:	8,50	EUR, Item gross price – Item price discount
BT-147	Item price discount:	1	EUR
BT-148	Item gross price:	9,50	EUR
BT-149	Item price base quantity:	1	Case
BT-131	Invoice line net amount:	-85,00	EUR, Invoiced quantity x (Item net price/Item price base quantity)
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%
BG-23	VAT BREAKDOWN		
BT-118	VAT category code:	Standard rate	%
BT-119	VAT category rate:	25	EUR, Sum of "Invoice line net amount" (where "VAT Category code" AND "VAT category rate" matches line information) (See BR-S-8)
BT-116	VAT category taxable amount:	127,50	
BT-117	VAT category tax amount:	31,88	EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded to two decimals. (See BR-CO-17)

BG/BT	Business Term Name	Value	Remarks / Calculation
BG-22	DOCUMENT TOTALS		
BT-106	Sum of Invoice line net amount:	127,50	EUR, Sum of "Invoice line net amount" (see BR-CO-10)
BT-109	Invoice total amount without VAT:	127,50	EUR, Sum of "Invoice line net amount" - Sum of allowances on document level + Sum of charges on document level (see BR-CO-13)
BT-110	Invoice total VAT amount:	31,88	EUR, Sum of "VAT category tax amount" (See BR-CO-14)
BT-112	Invoice total amount with VAT:	159,38	EUR, "Invoice total amount without VAT" + "Invoice total VAT amount" (see BR-CO-15)
BT-115	Amount due for payment:	159,38	EUR, "Invoice total VAT amount" - "Paid amount" (See BR-CO-16)

### A.1.7 Example 6 (Prepayment and negative Amount due for payment)

In this example the last rate for a car rental is invoiced. The price is 110,00 EUR excluded of VAT. The VAT rate is 25 %. A prepaid deposit on 250,00 EUR is credited.

Invoice Lines:

Invoice line identifier	Item name	Invoiced quantity	Item net price	Invoiced quantity unit of measure	Invoiced item VAT category code	Invoiced item VAT rate	Invoice line net amount
1	Car rental	1	110,00	Each	Standard rate	25	110,00

Calculations:

	Business Term Name	Value	Remarks / Calculation
BG-25	INVOICE LINE 1		
BT-129	Invoiced quantity:	1	Each
BT-130	Invoiced quantity unit of measure:	Each	
BT-146	Item net price:	110,00	EUR
BT-149	Item price base quantity:	1	Each
BT-131	Invoice line net amount:	110,00	EUR, Invoiced quantity x (Item net price/Item price base quantity)
BT-151	Invoiced item VAT category code:	Standard rate	
BT-152	Invoiced item VAT rate:	25	%

	Business Term Name	Value	Remarks / Calculation
BG-23	VAT BREAKDOWN		
BT-118	VAT category code	Standard rate	
BT-119	VAT category rate	25 %	
BT-116	VAT category taxable amount:	110,00	EUR, Sum of "Invoice line net amount" (where "VAT Category code" AND "VAT category rate" matches line information) (See BR-S-8)
BT-117	VAT category tax amount:	27,50	EUR, "VAT category taxable amount" x ("VAT category rate" / 100), rounded "half up" to two decimals. (See BR-CO-17)
BG-22	DOCUMENT TOTALS		
BT-106	Sum of Invoice line net amount:	110,00	EUR, Sum of "Invoice line net amount" (see BR-CO-10)
BT-109	Invoice total amount without VAT:	110,00	EUR, Sum of "Invoice line net amount" - Sum of allowances on document level + Sum of charges on document level (see BR-CO-13)
BT-110	Invoice total VAT amount:	27,50	EUR, Sum of "VAT category tax amount" (See BR-CO-14)
BT-112	Invoice total amount with VAT:	137,50	EUR, "Invoice total amount without VAT" + "Invoice total VAT amount" (see BR-CO-15)
BT-113	Paid amount	250,00	EUR
BT-115	Amount due for payment:	-112,50	EUR, "Invoice total VAT amount" - "Paid amount" (See BR-CO-16)

### A.1.8 Example 7 (Standard VAT including VAT exempted lines)

This example assumes two standard VAT rates of 10 % and 25 % respectively. The Invoice has the following line details.

Invoice Lines:

Invoice line identifier	Item Name	Invoice line net amount	Invoiced item VAT category code	Invoiced item VAT rate	Invoiced item VAT exemption reason text
1	Printer ink	125	Standard rate	25	
2	Poster print	24	Standard rate	10	
3	Office chair	136	Standard rate	25	
4	Wireless keyboard	95	Exempted from VAT	0	Reason A
5	Drive Adapter Cable	53	Exempted from VAT	0	Reason A

The same Invoice has the following details on document level:

	Business Term Name	Value	Remarks / Calculation
BG-21	DOCUMENT LEVEL CHARGES		
BT-99	Document level charge amount:	35	EUR
BT-102	Document level charge VAT category code:	Standard rate	
BT-103	Document level charge VAT rate:	25	%
BT-97	Document level charge reason:	Reason B	
BG-20	DOCUMENT LEVEL ALLOWANCES		
BT-92	Document level allowance amount:	15	EUR
BT-95	Document level allowance VAT category code:	Standard rate	
BT-96	Document level allowance VAT rate:	25	%
BT-97	Document level allowance reason:	Reason C	

#### VAT BREAKDOWN:

##### VAT category Standard rate (25 %)

- VAT category taxable amount (1) = Sum of Invoice line net amount plus sum of document level charge amount minus sum of document level allowance amount, where VAT category code equals S and the VAT rate equals 25 ( $125+136+35-15$ ) = 281 (See BR-S-8);
- VAT category rate = 25;
- VAT category tax amount = VAT category taxable amount (1)  $\times$  25/100 = 70,25 (See check).

##### VAT category Standard rate (10 %)

- VAT category taxable amount (2) = Sum of Invoice line net amount plus sum of document level charge amount minus sum of document level allowance amount, where VAT category equals S and the VAT rate equals 10 = 24 (See BR-S-8);
- VAT category rate = 10;
- VAT category tax amount = VAT category taxable amount (2)  $\times$  10 / 100 = 2,40 (See BR-CO-17).

##### VAT category E for reason A

- VAT category taxable amount (3) = Sum of Invoice line net amount where VAT category code equals E and VAT Exemption reason equals "Reason A" = 148 (See BR-E-8);
- VAT category rate = 0;
- VAT category tax amount = VAT category taxable amount (3)  $\times$  0 / 100 = 0 (See BR-CO-17);
- VAT exemption reason text = "Reason A".

##### Invoice totals

This example produces the following figures for the “Document totals” section:

Amounts used in the calculation	Example amounts
+ Sum of Invoice line net amount	433,00
- Sum of allowances on document level	15,00
+ Sum of charges on document level	35,00
= Invoice total amount without VAT.	453,00
+ Invoice total VAT amount (sum VAT category tax amounts)	72,65
= Invoice total amount with VAT	525,65
- Paid amount	0,00
= Amount due for payment	525,65

#### A.1.9 Example 8 (Reverse Charge, Intra EU supply and Export Invoices)

The Invoice has the following line details.

Invoice Lines:

Invoice line identifier	Item Name	Invoice line net amount	Invoiced item VAT category code	Invoiced item VAT rate	the invoiced item VAT exemption reasons text
1	Service 1	125	Reverse charge	0	Reverse charge
2	Service 2	24	Reverse charge	0	Reverse charge

The same Invoice has the following details on document level:

	Business Term Name	Value	Remarks / Calculation
BG-21	DOCUMENT LEVEL CHARGES		
BT-99	Document level charge amount:	20	EUR
BT-102	Document level charge VAT category code:	Reverse charge	
BT-103	Document level charge VAT rate:	0 %	

Based on this the Invoice has the following information on document level:

VAT category Reverse charge (0 %)

- VAT category taxable amount = Sum of Invoice line net amounts plus Document level charge amount where VAT category code equals Reverse charge = 169,00 (See BR-AE-8);
- VAT category rate = 0;
- VAT category tax amount = VAT category taxable amount x 0/100 = 0 (See BR-CO-17);

— VAT exemption reason text = Reverse charge.

#### Invoice totals

This example produces the following figures for the “Document totals” section:

Amounts used in the calculation	Example amounts
+ Sum of Invoice line net amount	149,00
- Sum of allowances on document level	0,00
+ Sum of charges on document level	20,00
= Invoice total amount without VAT	169,00
+ Invoice total VAT amount (sum VAT category tax amounts)	0,00
= Invoice total amount with VAT	169,00
- Paid amount	0,00
= Amount due for payment	169,00

## A.2 Number of decimals and rounding

Two understandings of the concept “rounding” exist in relation to this document.

1. One purpose of rounding can be to calculate the amount payable in cash. This way of rounding is common for some national currencies. E.g. in Denmark DKK is rounded to 50 øre, (10,29 approximately 10,50) since the Danish 50 øre is the lowest coin. This concept of rounding is not described in these examples;
2. The concept of Rounding is also relevant when describing all the calculation rules for the Invoice. When different levels of calculation are present and when different numbers of decimals are allowed, there is a risk of differences between the line and document level amounts due to rounding.

#### Scenarios:

The number of decimals allowed for different amounts and numbers and the rules for rounding on calculations can cause differences in the calculated amounts.

Some scenarios that can cause rounding issues are e.g. when the retail businesses need to calculate the item net price from the price with VAT, resulting in amounts with many decimals. Also companies with large Invoice quantities are at risk of having rounding errors, if they cannot specify enough decimals on the unit price.

#### Example 1:

Quantity	Net Price	Line net amount
10 000	1,024	10 240.00
10 000	1,02	10 200.00 (if the unit price is rounded to two decimals)

Rounding issues may also occur in relation to VAT, when calculating the VAT on the Invoice line compared to calculating the VAT at the document level.

#### Example 2:

The example illustrates an Invoice with six Invoice lines. Each line has a 25 % VAT and for illustration the VAT is calculated on line level and rounded to two decimals.

Id	Description	Quantity	Net Price	UOM	VAT %	VAT Amount	Invoice line net amount
1	Pens	25	5,69	CS	25	35,56	142,25
2	Paper	13	5,49	PK	25	17,84	71,37
3	Envelopes	15	3,99	PK	25	14,96	59,85
4	Sticky notes	25	1,69	PK	25	10,56	42,25
5	Paper clips	13	1,49	CS	25	4,84	19,37
6	Coloured clips	13	1,49	CS	25	4,84	19,37

If the total VAT is calculated as a summation of the line VAT Amounts the VAT is 88,60. In contrast if the VAT is calculated as 25 % of the summarized Invoice line totals the VAT is 88,62 – a difference of 0,02 due to the rounding.

## A.3 Use cases

### A.3.1 Taxes other than VAT

The EU Council Directive 2006/112/EC [2] Article 78 a) stipulates that "The taxable amount shall include the following factors: (a) taxes, duties, levies and charges, excluding the VAT itself".

Furthermore, excise duties are regulated in Directive 2008/118/EC [12], concerning the general arrangements for excise duty and repealing Directive 92/12/EEC, which provides that every Member State shall tax the following products: energy products and electricity; alcohol and alcoholic beverages and manufactured tobacco. Those products are taxed, in contrast with the VAT, considering as the taxable amount neither its economic value nor the total consideration paid for them, but the quantity of the corresponding product. Therefore, the determining of the tax amount does not rely on the application of a rate or percentage on a monetary taxable amount, but on a fixed monetary amount per units of product or related to the level of any physical characteristics (e.g. its calorific property; per degree of alcohol; etc.).

Those excise duties, in common with the VAT, share the nature of indirect taxes which essentially means that their purpose is to charge the consumption (or use) of the targeted products and, therefore, the tax amount shall be remitted to the purchaser of them. In some cases, it is therefore necessary to provide information in the Invoice on the details of such "Non-VAT Taxes".

This may be accommodated in the core Invoice model by either by:

- (1) specifying the applicable "Non-VAT tax" as a separate line in the Invoice;
- (2) specifying the applicable "Non-VAT tax" as a charge on line level of the Invoice (assuming that the "Non-VAT tax and the product/service are subject to the same VAT calculation; or
- (3) specifying the applicable "Non-VAT tax" as a charge on document level of the Invoice.

A non-VAT tax that acts as a substitute for VAT – Specified as a charge on line level

In the Canary islands and in Ceuta and Melilla VAT is not applicable (under article 6 of VAT Directive 2006/112/EC [2] the Canary Islands and Ceuta and Melilla are not considered as forming part of the VAT territorial scope), but a similar tax acting as a substitute for VAT is imperative. Therefore, Canary

Island General Indirect tax (IGIC) and Ceuta and Melilla tax (IPSI) are treated like VAT, with the appropriate VAT category code (IGIC, resp. IPSI).

Non-monetary taxable amount and non-percentage tax rate are specified as a separate Invoice line.

An example of a non-harmonized Spanish specific indirect tax is the tax on fluorinated greenhouse gases. This is a tax on greenhouse-effect fluorinated gases. Its two main features are:

- The taxable amount is not a monetary amount but a mass expressed in kilograms;
- The tax rate is not a percentage but a monetary amount per kilogram.

Example:

Fluorinated gas		Tax on greenhouse-effect fluorinated gases		VAT	
Price	20 000	Taxable amount	1000 kg	Taxable amount	31 000
Mass	1000 kg	Taxable rate	11 EUR/kg	Taxable rate	21 %
		Tax amount	11 000	Tax amount	6 510
	Price	Tax on greenhouse...	VAT		
TOTAL	20 000	+11 000	+6 510	=	37 510

ID	Business term name	Value example	Remark
BG-25	INVOICE LINE		The first Invoice line for the product itself
BT-126	Invoice line identifier	1	
BT-129	Invoiced quantity	1 000	
BT-130	Invoiced quantity unit of measure	kg	
BT-131	Invoice line net amount	20 000	
BG-29	PRICE DETAILS		
BT-146	Item net price	20,00	The price for each invoiced unit
BG-30	LINE VAT INFORMATION		
BT-151	Invoiced item VAT category code	S	Code stating that the sales is subject to a standard VAT rate
BT-152	Invoiced item VAT rate	21	%
BG-25	INVOICE LINE		The second Invoice line for the tax
BT-126	Invoice line identifier	2	

ID	Business term name	Value example	Remark
BT-129	Invoiced quantity	1 000	
BT-130	Invoiced quantity unit measure	kg	
BT-131	Invoice line net amount	11 000	
BG-29	PRICE DETAILS		
BT-146	Item net price	11	The price for each invoiced unit
BG-30	LINE VAT INFORMATION		
BT-151	Invoiced item VAT category code	Standard rate	Code stating that the sales is subject to a standard VAT rate
BT-152	Invoiced item VAT rate	21	%
BG-21	VAT BREAKDOWN		
BT-116	VAT category taxable amount	31 000	The sum of all taxable amounts subject to a specific VAT category
BT-117	VAT category tax amount	6 510	The VAT amount applicable
BT-118	VAT category code	Standard rate	
BT-119	VAT category rate	21	%
BG-22	DOCUMENT TOTALS		
BT-106	Sum of Invoice line net amount	31 000	
BT-109	Invoice total amount without VAT	31 000	
BT-110	Invoice total VAT amount	6 510	
BT-112	Invoice total amount with VAT	37 510	

An Excise duty that does not take part in VAT taxable amount calculations - Specified as a charge on document level

The main feature of the excise duty on certain means of transport is that, contrary to almost any other non-VAT tax, it does not take part in the VAT taxable amount calculations.

#### EXAMPLE

New car whose CO <sub>2</sub> emissions are between 120 and 160 g/km		Excise duty on certain means of transport		VAT	
Price	24 000	Taxable amount	24 000	Taxable amount	24 000
		Taxable rate	4,75 %	Taxable rate	21 %
		Tax amount	1 140	Tax amount	5 040

	Price	VAT	Excise duty		
TOTAL	24 000	5 040	1 140	=	30 180

ID	Level	Card	Business term name	Value example	Remark
BG-21	+	0..	DOCUMENT LEVEL CHARGE		
BT-99	++	1..1	Document level charge amount	1 140	The actual excise duty charged
BT-100	++	0..1	Document level charge base amount	24 000	The amount on which the excise duty is based
BT-101	++	0..1	Document level charge percentage	4,75	%
BT-102	++	1..1	Document level charge VAT category code	Exempt	Code stating that the charge (excise duty) is exempted from VAT
BT-103	++	0..1	Document level Charge VAT rate	0	%
BT-104	++	1..1	Document level charge reason	Excise duty	The reason why the charge (tax) is applied

## A.3.2 Allowances and charges

### A.3.2.1 Introduction

Allowances are usually some form of discount whereas charges would typically be a form of service provided by the Seller or their agent. Fundamentally, allowances are deductions from the Invoice total and Charges are additions to Invoice Total. Allowances and Charges can occur for the document as a whole or apply to individual line items or both. The method used would be based either by convention in a specific sector or upon agreement between the Buyer and Seller. For instance, transport charges, would typically be charged on the overall whereas servicing books, e.g. applying inserts with barcodes, would be a charge at line level.

### A.3.2.2 Charges at line level

Example:

Sales Company Ltd. services books as well as supplying them to Public Libraries. As some books require extra servicing the normal way to charge their Customers is to show the charges for each Line item. As the principle supply is the book and this is a composite supply, the charge has the same VAT rate as the Book. The following example shows the charge along with all mandatory elements required at line level.

Business Term ID	Business term name	Example value
BT-126	Invoice Line Identifier	1
BT-153	Item name	Barnacle Soup
BT-129	Invoiced Quantity	1
BT-146	Item net price	12,99
BT-130	Invoiced quantity unit of measure	D63
BT-151	Invoiced item VAT category code	Zero rated VAT
BT-131	Invoice line net amount	13,79
BG-28	Invoice Line charges	
BT-141	Invoice line charge amount	0,80
BT-144	Invoice line charge reason	Service charge

### A.3.2.3 Charges at document level

Example:

Sales Company Ltd. has a contract where delivery charges would be free when the goods value is over EUR 100. Therefore when the value of the goods total less than EUR 100, the Seller would include a charge at document level using **[AC]** Document level Charges as defined in BG-21 **[AC]**.

**[AC]** Document Level Charge (BT-99) **[AC]** would indicate the amount of the Delivery Charge before VAT is applied. As the charge has been determined to be at the standard rate, then **[AC]** Document Level charge VAT category code (BT-102) **[AC]** is set to Z. Finally **[AC]** Document level charge reason (BT-104) **[AC]** is set to "Transport charge".

The following example shows the charge along with all mandatory elements at header level.

Business Term ID	Business term name	Example value
BT-1	Invoice number	1
BT-2	Invoice issue date	2015-06-30
BT-3	Invoice type code	commercial Invoice
BT-5	Invoice currency code	EUR
BT-27	Seller name	Sales Company Ltd.
BT-31	Seller VAT identifier	IE1234568789
BT-44	Buyer name	NSIA Library
BG-21	Document level charges	
BT-99	Document level charge amount	3,00

Business Term ID	Business term name	Example value
BT-102	Document level charge VAT category code	Zero rated VAT
BT-104	Document level charge reason	Transport charge
BG-22	Document Totals	
BT-106	Sum of Invoice line net amount	13,79
BT-108	Sum of charges on document level	3,00
BT-109	Invoice total amount without VAT	16,79
BT-112	Invoice total amount with VAT	16,79
BT-115	Amount due for payment	16,79
BG-23	VAT breakdown	
BT-116	VAT category taxable amount	16,79
BT-117	VAT category tax amount	0,00
BT-118	VAT category code	Zero rated VAT

#### A.3.2.4 Allowances at line level

##### Price Discount

If the allowance is part of a price discount then this should be included in the Item net Price (BT-138). Item Net Price is mandatory as it is the basis of the calculation for all line items. Optionally, the system can provide the Item Gross Price (BT-140) and Item Price Discount (BT-139). Therefore, these two are for informational purposes only e.g. to show that a Price discount has been applied. In the model, all of this information is included in the Price Details group (BG-27).

##### Line Item Allowance

A line item allowance could be seen as a level 2 discount, with the Item Price Discount being level 1. Line Item Allowance could also be used where the Seller wants to specify the reason for the allowance. However the price used in the calculation of the total will always be Item Net Price.

##### Example:

Sales Company Ltd. has a contract to give a discount of 3 % when 10 or more of the same book is ordered. Therefore if 10 books are ordered at 12,99 each then an allowance of EUR 3,90 is given. As only the Allowance Amount is mandatory, then the Invoice will not show the percentage.

Business Term ID	Business term name	Example value
BT-126	Invoice Line Identifier	1
BT-153	Item name	Barnacle Soup
BT-129	Invoiced Quantity	10
BT-146	Item net price	12,99
BT-130	Invoiced quantity unit of measure	Each
BT-151	Invoiced item VAT category code	Zero rated VAT
BT-131	Invoice line net amount	134,00
BG-28	Invoice Line charges	
BT-141	Invoice line charge amount	8,00
BT-144	Invoice line charge reason	Service charge
BG-27	Invoice Line Allowances	
BT-136	Invoice line allowance amount	3,90
BT-139	Invoice line allowance reason	Quantity Discount

### A.3.2.5 Allowance at document Level

Example:

Sales Company Ltd. has a contract to give a discount of 2 % if the shipment is collected by the Customer. Therefore, when the Customer arranges the pick-up from Sales Company Ltd. premises, they will apply a 2 % discount on the Invoice.

Business Term ID	Business term name	Example value
BT-1	Invoice number	2
BT-2	Invoice issue date	2015-06-29
BT-3	Invoice type code	commercial Invoice
BT-5	Invoice currency code	EUR
BT-27	Seller name	Sales Company Ltd.
BT-31	Seller VAT identifier	IE1234568789
BT-44	Buyer name	NSIA Library
BG-20	Document Level Allowance	
BT-92	Document level allowance amount	2,68

Business Term ID	Business term name	Example value
BT-95	Document level allowance VAT category code	Zero rated VAT
BT-97	Document level allowance reason	Collected
BG-22	Document Totals	
BT-106	Sum of Invoice line net amount	134,00
BT-107	Sum of allowances on document level	2,68
BT-109	Invoice total amount without VAT	131,32
BT-112	Invoice total amount with VAT	131,32
BT-115	Amount due for payment	131,32
BG-23	VAT breakdown	
BT-116	VAT category taxable amount	131,32
BT-117	VAT category tax amount	0,00
BT-118	VAT category code	Zero rated VAT

### A.3.3 Factoring

#### A.3.3.1 Introduction

Factoring is a financial transaction and a type of debtor finance in which a business sells its accounts receivable (i.e. Invoices) to a third party (called a Factor) at a discount.

The process of factoring is illustrated in below diagram.

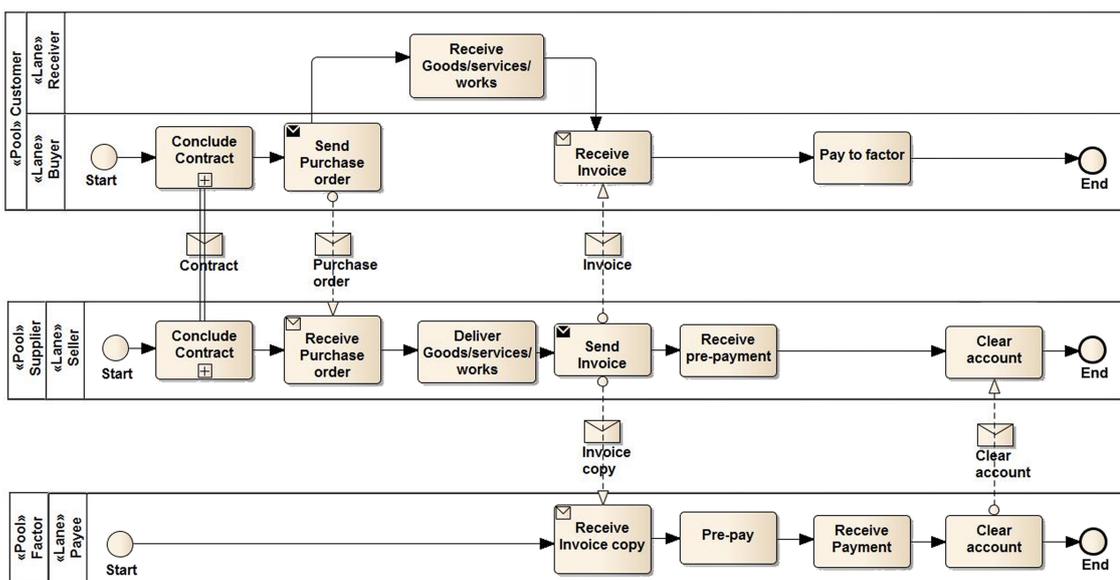


Figure A.1 — Factoring process

To reflect the assignment of an Invoice to a factor there is a need to:

- (1) have a disclaimer (notification notice) on the Invoice that the Invoice has been assigned to a factor;
- (2) identify the Factor as the Payee; and
- (3) to have the bank account changed to favour of a Factor.

Disclaimer (notification notice)

The disclaimer (notification notice) should be given using the Invoice note (BT-22) on document level.

ID	Level	Card	Business term name	Value example	Remark
BT-22	+	0..1	Invoice note	This Invoice has been factored. Payment of the stated amount to the specified account is considered as full settlement.	

### A.3.3.2 Identification of factor as Payee

An example of providing information about the Payee is provided below.

ID	Business term name	Value example	Remark
BG-4	SELLER		All relevant information about the Seller need to be provided, but is not shown in this example.
BG-7	BUYER		All relevant information about the Buyer need to be provided, but is not shown in this example.
BG-10	PAYEE		Name and identification of the factor.
BT-59	Payee name	Factoring Company Ltd	The name of the Payee, i.e. the name of the factor.
BT-60	Payee identifier	654321654	An identifier for the Payee, i.e. an identifier for the factor.
BT-61	Payee legal registration identifier	DE 987654321	The legal registration identifier for the factor.

### A.3.3.3 Bank account in favour of a factor

An example of payment to a factor using bank transfer is provided below.

ID	Business term name	Value example	Remark
BG-16	PAYMENT INSTRUCTIONS		
BT-83	Remittance information	1234567	In factoring the values of this reference, used to establish a link between the payment and the Invoice, is frequently established in

ID	Business term name	Value example	Remark
			corporation between the Seller and the factor.
BT-81	Payment means type code	SEPA credit transfer	This code value indicates a bank transfer
BG-17	CREDIT TRANSFER		
BT-84	Payment account identifier	BE68539007547034	The account number, IBAN, to which the transfer should be made. In the case of factoring this account is owned by the factor.

### A.3.4 Payment instructions

#### A.3.4.1 Introduction

This subclause demonstrates how the following use cases are supported in the core Invoice model.

- SEPA bank transfer;
- Non SEPA transfer using branch identifiers and BIC code;
- Payment card;
- Direct debit;
- Paid by a payment service provider.

#### A.3.4.2 SEPA bank transfer

ID	Business term name	Value example	Remark
BT-9	Payment due date	2015-12-31	Stated by Seller
BG-22	DOCUMENT TOTALS		
BT-115	Amount due for payment	1 000,00	
BG-16	PAYMENT INSTRUCTIONS		
BT-83	Remittance information	1234567	Issued by Seller
BT-81	Payment means type code	SEPA credit transfer	
BG-17	CREDIT TRANSFER		
BT-84	Payment account identifier	BE68539007547034	Account owner is Seller

**A.3.4.3 Non SEPA transfer using branch identifiers and BIC code**

ID	Business term name	Value example	Remark
BT-9	Payment due date	2015-12-31	Stated by Seller
BG-22	DOCUMENT TOTALS		
BT-115	Amount due for payment	1 000,00	
BG-16	PAYMENT INSTRUCTIONS		
BT-83	Remittance information	1234567	Issued by Seller
BT-81	Payment means type code	Credit transfer	
BG-17	CREDIT TRANSFER		
BT-84	Payment account identifier	BE68539007547034	Account owner is Seller
BT-86	Payment service provider identifier	ECBFDEFFBEM	

**A.3.4.4 Payment card**

ID	Business term name	Value example	Remark
BG-22	DOCUMENT TOTALS		
BT-115	Amount due for payment	1 000,00	
BG-16	PAYMENT INSTRUCTIONS		
BT-81	Payment means type code	Payment card	
BG-18	PAYMENT CARD INFORMATION		
BT-87	Payment card primary account number	123456	Card owner is Buyer

**A.3.4.5 Direct debit**

ID	Business term name	Value example	Remark
BT-9	Payment due date	2015-12-31	Stated by Seller
BG-7	BUYER		
BT-44	Buyer name	Buying Company Ltd	
BT-46	Buyer identifier	1234512345	
BG-22	DOCUMENT TOTALS		
BT-115	Amount due for payment	1 000,00	

ID	Business term name	Value example	Remark
BG-16	PAYMENT INSTRUCTIONS		
BT-81	Payment means type code	SEPA direct debit	
BG-19	DIRECT DEBIT		
BT-89	Mandate reference identifier	321654	
BT-90	Bank creditor Identifier	654321654	Receiver of payment
BT-91	Debited account identifier	BE68539007547034	Account owner is Buyer/Payee

#### A.3.4.6 Paid by a payment service provider

ID	Business term name	Value example	Remark
BG-22	DOCUMENT TOTALS		
BT-115	Amount due for payment	1 000,00	
BG-16	PAYMENT INSTRUCTIONS		
BT-83	Remittance information	51T107439Y074156A	
BT-81	Payment means type code	Payment card	
BT-82	Payment means text	Paid via online payment service provider XY	

#### A.3.5 Corrections

If a previously issued Invoice is found to have charged less than the proper amount, then a supplementary Invoice should be issued. It is essentially a normal Invoice, i.e. it charges VAT where appropriate, but it shall refer to the Invoice it is correcting.

The Invoice is determined as a correcting or supplementary Invoice when;

- the Business terms Group (BG-3) is included;
- the Preceding Invoice reference (BT-25) points to the original Invoice;
- the Preceding Invoice issue date (BT-26) may state the date of the original Invoice;
- Invoice Note (BT-22) may state the reason for the correction.

If the original invoice has been assigned to a Factor, the supplementary invoice has to be assigned to the Factor as well.

##### Decrease in Invoice Amounts – Credit Note or Negative invoice

If a previously issued Invoice is found to have charged more than the proper amount, then a Credit Note or a Negative invoice is issued. A Credit Note is similar to an Invoice except that the Invoice Type is set to Credit Note.

A Credit Note is determined as a credit to a previous Invoice when:

- the Invoice type code (BT-3) is set to “credit note”;
- This essentially means that all amounts are to be considered as a credit and thereby reducing the value of a preceding Invoice;
- the Business terms Group (BG-3) is included;
- the Preceding Invoice reference (BT-25) points to the original Invoice;
- the Preceding Invoice issue date (BT-26) may state the date of the original Invoice;
- Invoice Note (BT-22) may state the reason for the correction. Has the original invoice been assigned to a Factor the supplementary invoice has to be assigned as well.

Incorrect rate of VAT charged or other incorrect data– Credit Note or Negative invoice and revised Invoice

When correcting an Invoice, either a supplementary Invoice or a Credit Note/Negative invoice is normally issued. The Issuer should also usually consider whether it is better to fully credit the original Invoice and then re-issue a new Invoice. This shall specifically be done if the incorrect rate of VAT is used in the original Invoice. The Seller is essentially cancelling the Invoice and issuing a new one. Whereas the Credit note and the Negative invoice shall refer to the original Invoice, the replacement Invoice would not be required to indicate either the original Invoice or the Credit Note, as they are both effectively cancelled. Has the original invoice been assigned to a Factor the Seller has to assign the new issued invoice as well and to inform the Factor about the cancellation of the old one.

Example:

If a Seller charges VAT and then subsequently the goods were delivered outside of the Member State, the Seller shall fully credit the original Invoice and then re-issue a new Invoice exempted from VAT.

## **Annex B** (informative)

### **Assessment of the compliance of the European Standard with the requirements of the Standardization Request of the European Commission**

#### **B.1 Introduction**

Directive 2014/55/EU (the Directive) on electronic invoicing in public procurement aims at facilitating the use of electronic invoices by economic operators when supplying goods, works and services to the public sector. In particular, it sets out the legal framework for the establishment of a European standard (EN) for the semantic data model of the core elements of an electronic invoice.

The EN as presented is respectfully submitted as fully meeting the requirements of the Standardization Request in relation to those relating to the semantic model. Each issue raised in the Standardization Request has been set out below and then assessed as to whether and how it is resolved in the EN.

#### **B.2 Sections of the invoice**

It should first be noted that the Directive builds on a Recommendation of the European Multi-Stakeholder Forum on e-Invoicing on the use of a semantic data model to support the interoperability for electronic invoicing, issued on 1 October 2013. This Recommendation states that an invoice is considered to be composed of a number of distinct sections:

- The Core Section contains the basic information elements (i.e. the core elements referred to in the Directive) required to exchange electronic invoices between all types of trading entities (covering the basic needs of cross-border and cross-sector e-invoicing). It consists of a Legal Part plus a Common Part. The Legal Part is concerned with both the observance of tax and commercial laws and regulations pertaining to invoicing commonly in force throughout the EU. The Common Part contains commonly used and accepted commercial information elements, which are not sector or country specific.
- The Sector Section contains those information elements which are only a concern of a specific industry sector, community, supply chain or buyers and sellers of a particular type of product. Such information elements may be incorporated in an invoice as an 'Extension' to the Core Section information elements.
- The Country Section contains information elements or further information about such information elements, which represent the specific requirements of a particular Member State above and beyond the Core Section information elements

The Recommendation proposed to formalize the semantic data model of the core section of an electronic invoice in a European standard. This suggestion has to a large degree been taken into account. The Directive calls for the development of a European standard which defines the core elements of the invoice, while at the same time requesting guidelines on the use of the Country and Sector extensions.

It shall be stressed that, in line with the Directive, all contracting authorities and contracting entities in the EU will be obliged to receive and process an e-invoice as long as it contains the required core elements of an invoice defined in this document (and provided that it is represented in any of the syntaxes specified in CEN/TS 16931-2. The inclusion of any information which is not contained in this core will be at the sender's discretion. As such, any Country or Sector extension in an e-invoice shall by definition be optional.

The EN has been designed to ensure that all legally required information elements at country level are capable of being addressed in the Core Invoice Model of the EN. The Extension Methodology has been designed to allow trading parties to capture requirements for additional information elements and for these to be reflected in an invoice instance according to rules established in the Extension Methodology and by the parties to a particular Extension Specification. Whilst always optional, the use of an Extension may be subject to contractual conditions between the parties. Trading Parties may also use a Core Invoice Usage Specification to specify ways in which the Semantic Model is to be applied in a given trading situation, granted the various choices and cardinalities that exist. All these tools should ensure that the use of the EN can be flexibly applied to the needs of buyers and sellers

The following subclauses set out a number of requests that are embedded in the Standardization Request. Each is defined, discussed and a response provided as to how the EN reflects the requirement. The requirements are grouped into three categories: requirements arising from a number of identified EU projects, those arising from specific requirements and those arising from ESO (European Standards Organization) requirements. Relevance and Risk ratings have been assigned to these requirement (see page 15-16).

### B.3 How requirements in the Standardization Request are met in EN 16931-1

#### B.3.1 EU Projects

ID	Standardization Request Item	Relevance	Risk	Conclusion
1.1	Standardization Request Text: The work should take into account the European Interoperability Framework (EIF), and the interoperability solutions created under the ISA programme. <sup>5</sup>	LOW	LOW	MET
1.1.1	Discussion Based on its knowledge of the EIF <sup>5</sup> , CEN/TC 434 agreed in advance that a reactive approach should be taken with respect to the specific recommendations of the EIF, with the framework being considered as a point of reference and taken into account as and when the TC encountered potentially serious issues which appeared to be impacted. No such issues came to light during the work.			
1.1.2	Assessment of the draft EN with respect to this Standardization Request requirement Based on TC434 task force's knowledge and the high level nature of the vision expressed in the EIF, whose philosophy has already been embedded in much recent standardization work such as in the source standards for the EN, no specific further requirements for the EN were anticipated to be necessary. The EN is fully aligned with the EIF.			
ID	Standardization Request Item	Relevance	Risk	Conclusion
1.2	Standardization Request Text: The new Regulation on electronic identification and trust services (e-IDAS) for electronic transactions in the internal	MEDIUM	MEDIUM	MET

<sup>5</sup> <http://ec.europa.eu/idabc/servlets/Docb0db.pdf>

market with due respect to its date of entry into force.

#### 1.2.1 Discussion

Where used by trading parties, advanced electronic signatures or seals are relevant to the EN as by definition, they uniquely identify and link its signatory or seal creator to the content (authenticity of origin) and will invalidate the signature or the seal if the signed data has been tampered with (integrity of data). Advanced electronic signatures or seals can be technically implemented as described in Commission Implementing Decision (EU) 2015/1506 of 8 September 2015 laying down specifications relating to formats of advanced electronic signatures and advanced seals to be recognized by public sector bodies pursuant to Articles 27(5) and 37(5) of eIDAS Regulation. It establishes that XAdES, PAdES, CAdES and the associated containers shall be supported by Member States. The signature or the seal should always be applied to the transmitted payload so that the authenticity and integrity of the invoice can be verified during the whole legal archiving period and for confidentiality purposes.

At the message or header level, the transmitted message could be also signed or sealed (e.g. when sent using the AS2 protocol), for the whole or during a stage or stages of the transmission process, but the use of signatures or seals in these circumstances is separate from its use to ensure authenticity and integrity.

The requirements of the e-IDAS Regulation as stated above are important in the transmission layer for invoice delivery and for archiving purposes. They have no impact on invoice content as defined in the EN.

#### 1.2.2 Assessment of the draft EN with respect to this Standardization Request requirement

There are no implications for the Semantic Data Model for the draft EN arising from the e-IDAS Regulation.

ID	Standardization Request Item	Relevance	Risk	Conclusion
1.3.	Standardization Request Text: The results of Large Scale Pilot (LSP) projects implemented within the framework of the ICT Policy Support Programme (ICT-PSP) under the umbrella of the Competitiveness and Innovation Framework Programme (CIP).	MEDIUM	MEDIUM	MET

#### 1.3.1 Discussion

Liaisons were established with the LSP projects and relevant experts participated in the work of CEN/TC 434.

#### 1.3.2 Assessment of the draft EN with respect to this Standardization Request requirement

No issues came to light as a result of the above-mentioned liaisons.

ID	Standardization Request Item	Relevance	Risk	Conclusion
1.4	Standardization Request Text: The Digital Service Infrastructure (DSI) on e-invoicing to be deployed in the framework of the Connecting Europe Facility (CEF).	MEDIUM	MEDIUM	MET

1.4.1	Discussion			
	Liaisons were established with the CEF programme and ongoing discussion took place through CEF participation in the work of CEN/TC 434.			
1.4.2	Assessment of the draft EN with respect to this Standardization Request requirement			
	Since the CEF DSI e-invoicing initiative is a rolling effort fully supportive of the EN, and is not focused on standards design, no impact is foreseen.			

### B.3.2 Specific business requirements

ID	Standardization Request Item	Relevance	Risk	Conclusion
2.1a	Standardization Request Text: The EN should be technologically neutral	HIGH	MEDIUM	MET
2.1a.1	Discussion			
	<p>Technological neutrality requires that the EN should be capable of being expressed and used in any ICT (information and communications technology) environment, both presently available and foreseeably extending into the reasonable future. The EN will be rendered in a number of syntaxes and should also be capable of being carried in a container or envelope both as a structured message and as a human readable presentation. Since such an invoice, i.e. one that is compliant with the EN may carry confidential information it should be capable of encryption. The latter is considered not to compromise neutrality of approach in relation to technical solutions.</p> <p>It is clearly a very important requirement as without technological neutrality, the EN will not be widely adopted.</p>			
2.1a.2	Assessment of the draft EN with respect to this Standardization Request requirement			
	The requirement has been met- nothing in the EN design dictates that a particular technology is used for the creation, delivery or processing of an electronic invoice based on the EN.			
ID	Standardization Request Item	Relevance	Risk	Conclusion
2.1b	Standardization Request Text: The EN should be commercially neutral	HIGH	MEDIUM	MET
2.1b.1	Discussion			
	<p>Commercial neutrality entails that electronic invoices which comply with the EN:</p> <ul style="list-style-type: none"> <li>May be Used in any commercial situation involving any trading party</li> <li>May be delivered directly from one trading party to another, or be the subject of a processing and delivery service provided by an intermediary service organization.</li> <li>Do not dictate the commercial model underlying the supply of goods and services itself, or the commercial model in the provision of intermediary delivery or processing services</li> </ul> <p>These principles should be supported and all commonly encountered scenarios for commercial models should not be impeded.</p> <p>This is clearly a very important requirement as without commercial neutrality, the EN will not be widely adopted.</p>			
2.1b.2	Assessment of the draft EN with respect to this Standardization Request requirement			

The requirement has been met- nothing in the EN design dictates the commercial model that underlies a supply of goods and services or the creation, delivery or processing of an electronic invoice based on the EN.

ID	Standardization Request Item	Relevance	Risk	Conclusion
2.2	Standardization Request Text: The EN should be compatible with relevant international standards on e-invoicing	HIGH	LOW	MET
2.2.1	Discussion The semantic data model for the core elements of an e-invoice should be based on relevant commercial and technical specifications such as BII and MUG and should take into account other international standards such as: CII XML V2 and v3 UBL 2.1 Financial Invoice other formats (e.g. EDIFACT) other relevant technical specifications This requirement was embedded in the work of TC 434 as a key deliverable and reflected in project organization and methodology.			
2.2.2	Assessment of the draft EN with respect to this Standardization Request requirement The requirement has been met as the EN is essentially based on the above-mentioned standards with suitable evolution. Other international standards and specifications for particular components such as Code Lists were referenced as required.			
Id	Standardization Request Item	Relevance	Risk	Conclusion
2.3	Standardization Request Text: Have regard to the need for personal data protection in accordance with Directive 95/46/EC, to a 'data protection by design' approach and to the principles of proportionality, data minimization and purpose limitation	MEDIUM	MEDIUM	MET
2.3.1	Discussion This request is designed to ensure that the draft EN will support and certainly not impede present and emerging Data Protection requirements. The requirements of the Data Protection Frame work in the EU have been taken into account.			
2.3.2	Assessment of the draft EN with respect to this Standardization Request requirement There are no known impacts of regulatory requirements for personal data protection that negatively impact the Semantic Data Model. The design approach taken has been proportionate, based on required data only and does not take the core invoice model outside its essential and necessary purpose. Facilities exist for encrypting relevant data and required personal 'party' information is of a 'business card' nature only.			

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.4	Standardization Request Text: be compatible with Directive 2006/112/EC, and suitable for use with non-VAT invoices	HIGH	MEDIUM	MET
2.4.1	Discussion			
	In addition to leveraging VAT expertise in CEN/TC 434, the work included consultation with VAT experts to identify and ensure all the requirements of VAT and non-VAT invoices are covered. Where local taxes have characteristics essentially similar to VAT, those information elements have been used to express such taxes. Where other charges, imposts and other taxes are required they are handled at the line level in the core invoice model.			
2.4.2	Assessment of the draft EN with respect to this Standardization Request requirement			
	Completed and verified.			

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.5	Standardization Request Text: allow the establishment of practical, user-friendly, flexible and cost-efficient electronic invoicing systems	HIGH	MEDIUM	MET
2.5.1	Discussion			
	<p>All public sector contracting entities in the EU will be required to 'receive and process electronic invoices which comply with the EN and with any of the identified syntaxes which comply with the EN'. Consequently, the EN supports the invoicing requirements of the whole universe of public bodies and their suppliers, including those not currently familiar with the use of electronic invoicing. This also applies to private sector buyers and their suppliers.</p> <p>Based on the provisions of Directive 2014/55/EU, a contracting public authority or entity (including smaller and sub-central public authorities) will be required to support the receipt and processing of an e-invoice based on the European standard. It is preferable in the interests of cost saving and efficiency that contracting authorities adopt automated processing to the maximum extent feasible and where appropriate will no doubt consider the use of shared service models.</p> <p>To meet the above requirements, the focus needs to be on facilitating the development of systems involved in automating B2G and B2B electronic invoicing, either on a stand-alone basis, or as part of end to end e-Procurement systems - including the handling of domestic and cross-border transactions. Examples of applicable systems include Enterprise Resource Planning (ERP) and workflow systems, e-invoicing service provider platforms of all types, B2B networks, e-invoices delivered under a direct B2B model, and EDI systems. Any system that can create, deliver or process an electronic invoice in the context of a supply chain should be able to handle the EN in a way that encourages adoption, including the provision of standard implementation guidelines and user instructions.</p> <p>The providers of the above-listed e-invoicing systems and services include those provided by service and solution providers and those operated in-house by enterprises. The EN should be capable of being used by all such e-invoicing systems and platforms, which see a benefit in adopting the EN.</p> <p>If adoption by e-invoicing systems is not well supported or encouraged the adoption rate will be significantly affected. The Commission's goal of e-invoicing being the predominant method by 2020 will be at risk.</p>			

## 2.5.2 Assessment of the draft EN with respect to this Standardization Request requirement

Whilst this requirement has been in the mind of CEN/TC 434 throughout the design process, it is recognized that at various stages of the design, testing and implementation process, external input needs to be gathered from sources external to TC434 to provide a full assessment.

To ensure that this requirement has high probability of being met, TC 434 established a set of evaluation criteria which was included in a survey during the public inquiry phases of the CEN/TC 434 project to obtain feedback on the dimensions of practicality, and ease of use in relation to implementation of the EN. The results of this survey were somewhat inconclusive perhaps because the EN was still in the formative stage; some respondents were convinced on this point but others felt that it was too early to tell. Further efforts over time will be required to confirm all of the above-mentioned criteria, especially by contracting entities.

It should be stated, however, that since the semantic data model is based on existing well used standards, there is no reason to expect a negative outcome with regard to this Standardization Request. This conclusion does not include the syntax aspect, which is the subject of separate assessment.

A key source of information will be the output of Work Stream 8 (test results and methodologies), which will also address the issue of ensuring that the draft EN is simple and easy to use and support.

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.6	Standardization Request Text: take into account the special needs of small and medium-sized enterprises as well as of sub-central contracting authorities and contracting entities	HIGH	MEDIUM	MET
2.6.1	Discussion			

In using the Semantic Data Model, SMEs require ease of use and cost effectiveness. This means that the perceived cost and resource implications of adopting a solution based on the new standard should be less than or equal to their existing system, which may be paper based. Ease of use is vital as there will not necessarily be a requirement for SMEs to use EN compliant electronic invoicing only an enticement, except in situations where contracting authorities mandate its use. It will be vital for SMEs to ensure the provision by contracting authorities or their service providers of invoice data/invoice capture systems that as far as possible shield the SME from the implementation of the technical aspects of the core invoice model. It should also be possible to create EN compliant e-invoices that can be easily made presentable in a human readable format such as a PDF or a printed paper document.

The EN has been designed to support the needs of SMEs and smaller contracting authorities. The CEN TC 434TC 434 has engaged in a process to balance the need for potential richness of functionality against the criteria for ease of use. This has been a deliberate process.

The Semantic Data Model confines itself to the information elements that are strictly necessary (at least in relation to mandatory elements). This will ensure a simple model which can be easily adopted by processing systems. The model has been contained within reasonable boundaries without too much functionality embellishment.

The development of the Core Invoice Usage Specification as a tool for use by trading parties holds the key to ensuring ease of use by SMEs and smaller contracting entities. Such a specification issued by a contracting entity allows the content of the invoice in a specific trading context to be confined to a selection of information elements including those required on a mandatory basis together with other commonly required elements, so as to suit the needs and capabilities of smaller trading parties. The degree of optionality and cardinality in the semantic data model supports such a tailoring process. It is further expected that SMEs are

unlikely to participate in invoice extensions to any substantial extent.

#### 2.6.2 Assessment of the draft EN with respect to this Standardization Request requirement

To ensure that the needs of SMEs and smaller contracting entities will be met, TC 434 established a set of evaluation criteria which was included in a survey during the public inquiry phase of the CEN/TC 434 project to obtain feedback on the dimensions of ease of use in relation to implementation of the EN. The results of this survey were somewhat inconclusive perhaps because the EN was still in the formative stage; some respondents were convinced on this point but others felt that it was too early to tell. Further efforts will be required over time to confirm all of the above-mentioned criteria. Work Stream 8 (test results and methodologies) should also ensure that the EN is simple and easy to use.

The importance of appropriate use of the Core Invoice Usage Specification has already been stressed above. It should also be recognized that support for smaller entities is not just a matter for the design of the semantic data model; it is also dependent on the existence in the wider eco-system of tools and services aimed at serving the needs of these entities.

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.7	Standardization Request Text: not require, and not impede, the use of electronic signatures or seals	MEDIUM	LOW	MET

##### 2.7.1 Discussion

The EN should not require the use of electronic signatures or seals, nor prevent their use. Neutrality is important. It is important to ensure that the draft EN design is neutral as to the use of electronic signatures and seals, and their presence, if used, does not have an impact on invoice content. In the unlikely event that the project did not observe this requirement it would limit usage.

#### 2.7.2 Assessment of the draft EN with respect to this Standardization Request requirement

Since electronic signatures and seals are not an intrinsic part of the invoice content represented by the standardized e-invoice represented by the EN, this requirement will not be a hurdle. E-Signatures and Seals, if used, are added subsequent to invoice creation and this aspect is explained in the Guidelines at the Transmission level, another deliverable of CEN/TC 434.

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.8	Standardization Request Text: The Draft EN should contain an informative annex which provides a clear, transparent and precise indication of the relationship between the elements of the EN and the corresponding EU legal requirements specified in this standardization request	MEDIUM	LOW	MET

##### 2.8.1 Discussion

The need to publish this informative annex is well understood and supported.

#### 2.8.2 Assessment of the draft EN with respect to this Standardization Request requirement

CEN PC434 has prepared the informative annex containing the comparison with appropriate legal support. This is considered to be an important due diligence process.

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.9	Standardization Request Text:			
	Should help to preserve investments already made at national level	HIGH	MEDIUM	MET
2.9.1	Discussion			
	<p>The requirement has the purpose of ensuring that the stakeholders affected by the EN will not render existing investments in e-invoicing redundant or incapable of continued operation, especially those already operating at a national level, or those operating more widely. Of course, where existing investments are not worthy of preservation, market forces will usually trigger their demise. Realism is required.</p> <p>It is already clear that Member State contracting authorities are quite free to continue to use existing systems and standards that have already been implemented. There should be no doubt about this so as to avoid a freeze on market development until the standard is deployed. The following points have been taken into consideration in designing the semantic data model:</p> <p>Given its basic similarity to other already used e-invoicing standards, the EN can be implemented in existing systems without significant impact. The semantic data model does not add functionality not already largely present in such existing standards.</p> <p>It will be possible to incorporate the EN into existing solutions based on widely available mapping tools.</p>			
2.9.2	Assessment of the draft EN with respect to this Standardization Request requirement			
	<p>It is considered that the Draft EN has taken full cognisance of the issues raised above. The requirement has been met by basing the design of the semantic data model on previous work done (MUG and CEN BII being the main sources) and by ensuring that current e-invoicing specifications and standards used in the Member States that have implemented the mandatory use of e-Invoicing have been referenced and considered as input to the work.</p> <p>The issue, however will be ongoing and the following actions are proposed as follow-up initiatives:</p> <p>Guidelines and information about the EN: There will be a need to develop and issue information and guidelines including model checklists and recommendations on how to implement the EN in existing national level solutions. The actual content of the guidelines will obviously need to be elaborated and detailed covering both the EN and the syntax implementation.</p> <p>Semantic model: the semantic model itself needs to be well documented with an implementation perspective particularly in the context of existing national systems.</p> <p>Survey required: organizations providing existing national level solutions should be questioned and asked to present an assessment of the expected effort to implement the EN and its supported syntaxes.</p>			
Id	Standardization Request Item	Relevance	Risk	Conclusion
2.10	Standardization Request Text:			
	include the physical and financial supply chain perspective, i.e. not treat the invoice in isolation but consider related trade and finance documents <sup>19</sup> and processes (e.g. reconciliation, supply chain finance, credit notes, etc.), and reflect both private and public sector requirements, with a view to allowing the full straight-through processing (STP) of an electronic invoice	HIGH	LOW	MET

### 2.10.1 Discussion

An invoice does not exist in isolation but forms part of a chain of events and processes. The physical supply chain (PSC) describes the system of organization, people, activities, information, and resources involved in moving a product or service from supplier to buyer. Supply chain activities transform raw materials, intellectual property and components into a finished product or service that is delivered to the final buyer. The financial supply chain (FSC) refers to the risk management practices and transactions that facilitate the purchase (procurement) of, and payment for, goods and services, such as concluding contracts, exchanging purchase orders and invoices, managing liquidity, raising working capital finance, and making payments.

The most important factor in ensuring that the invoice plays its pivotal role in the PSC and FSC is its use of reference information that links it unambiguously to both preceding and subsequent supply chain events such as the procurement process, the delivery process, and subsequent financing and payments. A set of sufficient reference fields with definitions have been identified and included in the semantic data model. These references will support two and three-way matching processes for both internal control/reconciliation, and for demonstrating that the trading party's business process controls support the authenticity and integrity of the transaction for fiscal purposes.

The needs of the procurement {or e-Procurement} process have been included including references such as purchase order and despatch advices, delivery notes etc. Particular attention has been paid to the needs of the public sector to receive specific references for contracts, public tenders and other means to ensure control over public expenditure.

Particular attention has also been paid to the requirement that an invoice or group of invoices should be unambiguously identified by means of remittance information that can accompany an electronic payment linked to that invoice or group of invoices. The payment aspect of invoicing will be fully supported. The model caters for standing instructions where the payment details are held by the buyer separately in a secure database and not referred to in the body of the invoice. It also caters for payment instructions embedded in a single invoice and referring to: payment instrument, institution, account numbers and routing information as required. CEN/TC 434 took steps to refer all such payment aspects to the European Payments Council for review. The needs of the factoring industry engaged in invoice finance have also been taken into account.

All selected references will permit the straight-through-processing of transactions through a supply chain in the systems of both the trading parties and any related service providers, including timely reconciliation. Credit Notes and negative value invoices are also included. The approach taken has reflected the potential for a reasonable level of automation- and not to a level of perfection where costs outweigh benefits. There is a reasonable balance in meeting the needs of contracting entities, whether in the public or private sector, and the needs of suppliers of all sizes in managing their supply chain activities.

### 2.10.2 Assessment of the draft EN with respect to this Standardization Request requirement

It is considered that the Draft EN has taken full cognisance of the issues raised above. In particular, it is clearly the case that a rich set of reference information elements have been provided in the EN covering all stages of the physical and financial supply chain.

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.11	Standardization Request Text:  be suitable for voluntary use in commercial transactions between enterprises and have the capacity to reflect specific needs and requirements of the business-to-business (B2B) ecosystem	HIGH	MEDIUM	MET
2.11.1	Discussion			
<p>As a core invoice EN, the data set should apply equally to both public and private sector transactions and there should be no difference between the two. If private sector requirements were not to be incorporated the adoption of the EN will be limited to public sector use and suppliers will be faced with ‘silos’.</p> <p>The Core Invoice Usage Specification tool incorporated into the design gives an important flexibility to contracting entities in both the public and private sectors. Any additional requirements of both public sector and private sector trading communities have been reflected in the Extension methodology.</p> <p>The semantic data model has a wide variety of both ‘mandatory’ and ‘optional’ information elements. To the maximum extent possible, the information elements use established international standards and practices for items like dates, units of measure etc. and appropriate code lists. Where appropriate such items should be repeating elements based on a standard approach. Buyer and supplier references such as cost centres and other codes should be catered for to a reasonable extent. These features will suit private sector entities already familiar with such data practices.</p> <p>The semantic data model will support processes at sender, service provider and buyer level to validate the invoice and establish compliance with fiscal and other requirements. There should be sufficient line level detail in the invoice to support the operations of the trading parties.</p>				
2.11.2	Assessment of the draft EN with respect to this Standardization Request requirement			
<p>It is considered that the Draft EN has taken full cognisance of the issues raised above.</p>				
Id	Standardization Request Item	Relevance	Risk	Conclusion
2.12	Standardization Request Text:  be re-usable in other standardization initiatives	LOW	LOW	MET
2.12.1	Discussion			
<p>Re-usability in other standardization initiatives is a rather wide and unspecific requirement. As the EN has been developed based on a strong methodology using well accepted information elements and components, the reusability (for example to create a standard purchase order) should be facilitated</p>				
2.12.2	Assessment of the draft EN with respect to this Standardization Request requirement			
<p>It is considered that this requirement whilst important has had a low impact on the project. The EN has taken full cognisance of the issues raised above.</p>				

Id	Standardization Request Item	Relevance	Risk	Conclusion
2.13	Standardization Request Text: The EN should contain, <i>inter alia</i> , the elements mentioned in Article 6 of the Directive 2014/55/EU.	HIGH	LOW	MET
2.13.1	Discussion The Article 6 requirements need to be taken into account as a fundamental requirement			
2.13.2	Assessment of the draft EN with respect to this Standardization Request requirement This requirement has been fully met.			

### B.3.3 ESO (European Standardization Organization- CEN) requirements

Id	Standardization Request Item	Relevance	Risk	Conclusion
3.1	Standardization Request Text: The European standard (EN) and the ancillary deliverables described above shall take due account of any relevant material developed (or which will be developed in future) by the European Multi-Stakeholder Forum on e-Invoicing.	MEDIUM	LOW	MET
3.1.1	Discussion It is essential that close cooperation and cross representation with EMSFEI is maintained			
3.1.2	Assessment of the draft EN with respect to this Standardization Request requirement This requirement has been fully met. For example, a trilateral meeting between the European Commission, the CEN TC 434 Management group and the activity leaders of the EMSFEI has been held to discuss policy aspects impacting the Draft EN.			
Id	Standardization Request Item	Relevance	Risk	Conclusion
3.2	Standardization Request Text: The standardization work shall take into account the documents to be used during the e-Procurement process, such as price list (or e-catalogue) and the associated orders, in order to have a rational and integrated approach. The possibility of allowing multilingualism and multicurrency usage shall also be taken into account.	HIGH	LOW	MET
3.2.1	Discussion The requirement set out in the first sentence has been discussed above in section 2.10. Multilingualism and multicurrency are essential if the EN is to find adoption.			
3.2.2	Assessment of the draft EN with respect to this Standardization Request requirement Provisions for languages and currencies have been extensively discussed during the project and an appropriate rules-based approach included.			

Id	Standardization Request Item	Relevance	Risk	Conclusion
3.3	Standardization Request Text:			
	Preservation of the existing investments made for e-invoicing implementation shall be ensured. The stability and the maintainability of the data model shall be considered at the same time.	MEDIUM	LOW	MET
3.3.1	Discussion			
	The requirement in the first sentence has been discussed in section 2.9 above, which also contains recommendations on usability. Stability and longevity of the model has been considered at all stages, and will be fully determined during the testing phase.			
3.3.2	Assessment of the draft EN with respect to this Standardization Request requirement			
	This requirement is considered as met.			
Id	Standardization Request Item	Relevance	Risk	Conclusion
3.4	Standardization Request Text:			
	All key stakeholders shall be directly represented in the work of the ESO (Project or Technical Committee, work groups, etc.) through National Standard Body delegations, ESOs Technical Committee and Workshop delegations, liaison partnerships, expert invitees, etc.	MEDIUM	LOW	MET
3.4.1	Discussion			
	In order to ensure that the ESO (European Standards Organization) work engages with all stakeholders the CEN/TC 434 Management Group should monitor the composition and contributions of its members. For example, were there sufficient contribution from contracting authorities, and the professionals who support the SME community?			
3.4.2	Assessment of the draft EN with respect to this Standardization Request requirement			
	The composition of CEN/TC 434 was a matter for National Standards Organizations, which set out to ensure input from relevant stakeholders. A number of public sector representatives were either directly involved in the work of CEN/TC 434 or through national mirror committees. For SMEs it is always difficult to find direct participation, but a number of associations, governments and those already familiar with e-invoicing for the 'long tail' of suppliers were involved, either as NSO delegates or as liaison partners.			

## **B.4 Guide to indicators for relevance and risk as used in the above tables**

### **B.4.1 Relevance rating**

This is a Red, Amber, Green colour coding rating to indicate the level of importance to the EN design that the WS3 team have assigned to the requirements from the standardization. The intention was to provide the TC 434 semantic data model design team with a quick reference to help identify those requirements which are deemed to be of higher importance or relevance to the draft EN design. The colour coding is intended to indicate the following:

- ◀→Low importance: Limited impact on draft EN design is expected.
- ◀→Medium importance: Likely that there will be an impact on draft EN design.
- ◀→High importance: Probable and essential that there will be an impact on the draft EN design.

### **B.4.2 Risk rating**

This is a Red, Amber and Green colour coding to indicate an assessment of the risk that the requirement concerned might not be solved satisfactorily in the timescale available. Examples of factors involved are lack of expertise, lack of clarity, lack of consensus or complexity.

The intention is to provide the TC 434 semantic data model design team with a quick reference to help identify those requirements the delivery of which is deemed to be at higher risk. The colour coding is intended to indicate the following:

- ◀→Low importance: resolution of issues at limited risk.
- ◀→Medium importance: Possible there will be a risk of non-complete resolution.
- ◀→High importance: Probable there will be a risk of non-complete resolution.

## Annex C (informative)

### How the semantic model meets legal requirements from relevant directives

Directive 2014/55/EU [1] provides in its article 6, the base requirements in terms of groups of information that the core semantic data model details in the column marked '2014/55/EU [1]' in the table below.

Directive 2014/55/EU [1] also mainly refers to other directives among which mainly 2006/112/EC [2] affects the content of the core Invoice:

- Directive 2006/112/EC [2], last version: 2006L0112 - EN - 01.01.2015 - 016.001;

The following requirements have been considered out of scope and so are not supported by the core invoice model:

- Article 223 about summary Invoices allowing referencing many deliveries;
- Article 224 and Article 226 10a about self-billing;
- Article 226 a and Article 226b about simplified Invoice.

Other requirements have been mapped to the elements in column 2006/112/EC amended by 2010/45/EC [2]:

- Directive 2011/7/EU [3] on combating late payment in commercial transactions requires a well identified recipient (See term Buyer electronic address).

**Table C.1 — References to directive articles**

ID	Business Term	Description	2014/55/EU [1]	2006/112/EC amended by 2010/45/EC
BT-1	Invoice number	A unique identification of the Invoice.	Art 6 a	Art 226 2
BT-2	Invoice issue date	The date when the Invoice was issued.		Art 226 1
BT-5	Invoice currency code	The currency in which all Invoice amounts are given, except for the Total VAT amount in accounting currency.	Art 6 l	Art 230
BT-6	VAT accounting currency	The currency used for VAT accounting and reporting purposes as accepted or required in the country of the seller.		Art 230

ID	Business Term	Description	2014/55/EU [1]	2006/112/EC amended by 2010/45/EC
BT-7	Value added tax point date	The date when the VAT Becomes accountable for the Seller and for the Buyer in so far as that date can be determined and differs from the date of issue of the invoice.		Art 226 7
BT-8	Value added tax point date code	The VAT point date according to Art. 63 - 67		Art. 227 7a, Art. 63 - 67
BT-9	Payment due date	The date when the payment is due.	2011/7/EU [3]	
BT-12	Contract identifier	The identification of a contract.	Art 6 g	
BT-20	Payment terms	A textual description of the payment terms that apply to the amount due for payment (Including description of possible penalties).	2011/7/EU [3]	
BG-2	PROCESS CONTROL	A group of business terms providing information on the business process and rules applicable to the Invoice document.	Art 6 a	
BG-3	PRECEDING INVOICE REFERENCE	A group of business terms providing information on one or more preceding Invoices.		Art 219
BG-4	SELLER	A group of business terms providing information about the seller.	Art 6 c	
BT-27	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.		Art 226 5
BT-31	Seller VAT identifier	The Seller's VAT identifier (also known as Seller VAT identification number).		Art 226 3
BT-32	Seller tax registration	The local identification of the Seller for tax purposes or a reference that enables the Seller to state his registered tax status.		Art 239
BG-5	SELLER POSTAL ADDRESS	A group of business terms providing information about the address of the Seller.		Art 226 5
BG-6	SELLER CONTACT	A group of business terms providing contact information about the Seller.	Art 6 c	

ID	Business Term	Description	2014/55/EU [1]	2006/112/EC amended by 2010/45/EC
BG-7	BUYER	A group of business terms providing information about the Buyer.	Art 6 d	
BT-44	Buyer name	The full name of the Buyer.		Art 226 5
BT-49	Buyer electronic address	Identifies the Buyer's electronic address to which the invoice is delivered.	2011/7/EU [3]	
BT-48	Buyer VAT identifier	The Buyer's VAT identifier (also known as Buyer VAT identification number).		Art 226 4
BG-8	BUYER POSTAL ADDRESS	A group of business terms providing information about the postal address for the Buyer.		Art 226 5
BG-9	BUYER CONTACT	A group of business terms providing contact information relevant for the Buyer.	Art 6 d	
BG-10	PAYEE	A group of business terms providing information about the payee, i.e. the role that receives the payment.	Art 6 e	
BG-11	SELLER TAX REPRESENTATIVE PARTY	A group of business terms providing information about the Seller's tax representative.	Art 6 f	Art 226 15
BG-12	SELLER TAX REPRESENTATIVE POSTAL ADDRESS	A group of business terms providing information about the postal address for the tax representative party.		Art 226 15
BG-13	DELIVER TO INFORMATION	A group of business terms providing information about where and when the goods and services invoiced are delivered.	Art 6 h	
BG-14	DELIVERY OR INVOICE PERIOD	A group of business terms providing information on the delivery or invoice period.	Art 6 b	
BG-15	DELIVER TO ADDRESS	A group of business terms providing information about the address to which goods and services invoiced were or are delivered.	Art 6 h	
BG-16	PAYMENT INSTRUCTIONS	A group of business terms providing information about the payment.	Art 6 i	

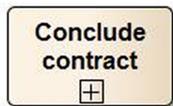
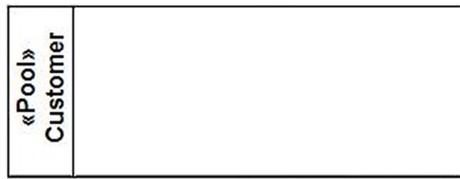
ID	Business Term	Description	2014/55/EU [1]	2006/112/E C amended by 2010/45/EC
BG-17	CREDIT TRANSFER	A group of business terms to specify credit transfer payments.	Art 6 i	
BG-18	PAYMENT CARD INFORMATION	A group of business terms providing information about card used for payment contemporaneous with invoice issuance.	Art 6 i	
BG-20	DOCUMENT LEVEL ALLOWANCES	A group of business terms providing information about allowances applicable to the Invoice as a whole.	Art 6 j	
BG-21	DOCUMENT LEVEL CHARGES	A group of business terms providing information about charges and taxes other than VAT, applicable to the Invoice as a whole.	Art 6 j	
BG-22	DOCUMENT TOTALS	A group of business terms providing the monetary totals for the Invoice.	Art 6 l	
BT-110	Invoice total VAT amount	The total VAT amount for the Invoice.		Art 226 10
BT-111	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.		Art 230
BT-115	Amount due for payment	The outstanding amount that is requested to be paid.	2011/7/EU [3]	
BG-23	VAT BREAKDOWN	A group of business terms providing information about VAT breakdown by different categories, rates and exemption reasons	Art 6 m	Art 226 8
BT-119	VAT category rate	The VAT rate, represented as percentage that applies for the relevant VAT category.		Art 226 9
BT-120	VAT exemption reason text	A textual statement of the reason why the amount is exempted from VAT or why no VAT is being charged		Art 226 11 to 14
BG-25	INVOICE LINE	A group of business terms providing information on individual Invoice lines.	Art 6 k	
BG-26	INVOICE LINE PERIOD	A group of business terms providing information about the Invoice period relevant for the Invoice line.	Art 6 b	

ID	Business Term	Description	2014/55/EU [1]	2006/112/EC amended by 2010/45/EC
BG-27	INVOICE LINE ALLOWANCES	A group of business terms providing information about allowances applicable to the individual Invoice line.	Art 6 j	
BG-28	INVOICE LINE CHARGES	A group of business terms providing information about charges and taxes other than VAT applicable to the individual Invoice line.	Art 6 j	
BG-29	PRICE DETAILS	A group of business terms providing information about the price applied for the goods and services invoiced on the Invoice line.	Art 6 k	
BG-30	LINE VAT INFORMATION	A group of business terms providing information about the VAT applicable for the goods and services invoiced on the Invoice line.	Art 6 m	Art 226 8
BG-31	ITEM INFORMATION	A group of business terms providing information about the goods and services invoiced.	Art 6 k	
BG-32	ITEM ATTRIBUTES	A group of business terms providing information about properties of the goods and services invoiced.	Art 6 k	
BG-31	ITEM INFORMATION	nature of the goods supplied or the extent and nature of the services rendered		Art. 226 (6)
BT-153	Item name			
BT-154	Item description			
BT-155	Item Seller's identifier			
BT-156	Item Buyer's identifier			
BT-157	Item standard identifier			
BT-158	Item classification code			
BT-159	Item country of origin			

## **Annex D** (informative)

### **BPMN symbols**

The following symbols are used in the process diagrams. For a full explanation, see the Business Process Model and Notation (BPMN) specification [12].



— A Pool is the graphical representation of a Participant in a Collaboration. It also acts as a “swim lane” and a graphical container for partitioning a set of Activities from other Pools, usually in the context of B2B situations.

— A Lane is a sub-partition within a Process within a Pool, and will extend the entire length of the Process. Lanes are used to organize and categorize Activities.

— An Activity is a generic term for work that an organization performs in a Process. Activities are represented by rounded rectangles. An Activity can be atomic (no icon inside) or non-atomic (compound: with a small plus sign near the bottom).

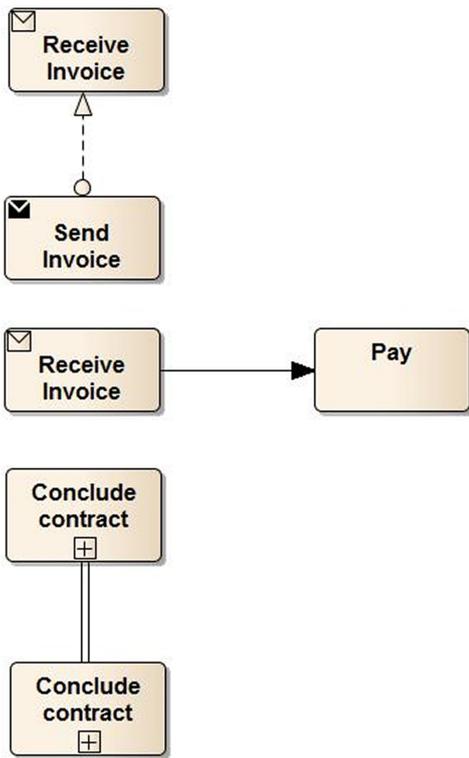
Activities that consist of sending a message have a black envelope in the upper right corner. Activities that consist of receiving a message have a white envelope in the upper right corner.

— A message is represented as an envelope.

— Circles represent events. An event that starts a process has a thin border; an event that ends a process has a thick border

— Diamond shapes represent gateways indicating the type of flow control behaviour. The types of control include:

- Exclusive decision and merging (no icon in the diamond);
- Parallel Gateway forking and joining (a plus sign inside the diamond);
- Complex Gateway; complex conditions and situations, e.g. 3 out of 5 (a star inside the diamond).



— Message flows are indicated with a dotted arrow.

— Sequence flows are indicated with an arrow.

— Conversations (multiple communication flows that are not further detailed) are indicated with a double line.



## Annex E (informative)

### A-deviations

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN-CENELEC national member.

This European Standard falls under Directive 2014/55/EU.

NOTE (from CEN/CENELEC IR Part 2:2015, 2.16) Where standards fall under EC Directives or Regulations, it is the view of the Commission of the European Communities (OJ No C 59; 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p. 3583) is that compliance with A-deviations is no longer mandatory and that the free movement of products complying with such a standard should not be restricted within the EC except under the safeguard procedure provided for in the relevant Directive or Regulation.

A-deviations in an EFTA-country are valid instead of the relevant provisions of the European Standard in that country until they have been removed.

Clause	Deviation
6.4.3.2	<p>Applicable to Italy.</p> <p>In addition to the “S” Standard rate it is allowed to use: “B” Transferred (VAT). VAT not to be paid to the issuer of the invoice but directly to relevant tax authority.</p>
6.4.3.3.2	<p>Applicable to Italy.</p> <p>All business rules that apply to VAT category code “S” apply also to VAT category code “B”.</p> <p>Business terms which are related to this deviation are:</p> <ul style="list-style-type: none"> <li>BT-95 Document level allowance VAT category code</li> <li>BT-102 Document level charge VAT category code</li> <li>BT-118 VAT category code</li> <li>BT-151 Invoiced item VAT category code</li> </ul> <p>The VAT total tax amounts related to “B” category will not be paid to the seller but directly by the buyer to relevant tax authority. For such reason the invoice document totals represents this information in BT-115 (Amount due for payment) using BT-113 (Paid amount) to deduct the tax amount subject to <i>split payment</i>.</p> <p>Additional information may be provided in BT-20 (Payment terms) or in BT-22 (Invoice note). For example: “<i>The total is without the VAT amount due to split payment (ex art.17-ter - DPR 633/1972)</i>”.</p>

#### Identification of national regulation that require deviations

In Italy a specific VAT rule for Public Authorities supplies called “split payment” is in force since 2015 and requires that VAT has to be paid by the buyer (the public authority) directly to the State Treasury and not to the supplier, according to the general VAT rules.

The supplier has an obligation to indicate the application of split payment for the goods/services supplied to public authorities that are subject to VAT. This is currently not allowed in EN 16931-1 and this would prevent Italian suppliers to issue invoices compliant with the European standard.

The split payment is a derogation from VAT Directive authorized according to the procedure set out by Art 395 of the VAT Directive (2006/112/CE). The result of the procedure was the publication of the Council Implementing Decision (EU) 2017/784 of 25 April 2017. It's to be noted that Article 2 of the Decision reads: "By way of derogation from Article 226 of Directive 2006/112/EC, Italy is authorised to require that invoices, issued in relation to supplies of goods and services to the entities listed under Article 1 include a special remark that VAT has to be paid to that separate and blocked bank account of the tax authority."

The split payment has accordingly been introduced in the Italian Republic President Decree (DPR) n. 633/1972 Article 17-ter that reads:

Original text	Translation
<p style="text-align: center;">Articolo 1</p> <p>1. Alle cessioni di beni ed alle prestazioni di servizi di cui all'art. 17-ter del decreto n. 633 del 1972, effettuate nei confronti delle pubbliche amministrazioni ivi contemplate, di seguito "pubbliche amministrazioni", e per le quali tali amministrazioni non sono debitori d'imposta ai sensi della normativa in materia di imposta sul valore aggiunto, si applicano le disposizioni del presente decreto.</p> <p>2. Per le operazioni di cui al comma 1 l'imposta sul valore aggiunto è versata dalle pubbliche amministrazioni cessionarie di beni o committenti di servizi con effetto dalla data in cui l'imposta diviene esigibile.</p>	<p style="text-align: center;">Article 1</p> <p>1. The provisions of the this decree apply to the supplies of goods and services referred to in Article 17-ter of Decree No 633 of 1972, carried out for the benefit of the public administrations referred to therein, hereinafter referred to as "public administrations", and for which such administrations are not liable for payment of tax within the meaning of the legislation on value added tax.</p> <p>2. For the transactions referred to in paragraph 1, value added tax shall be paid by the public authorities to which the goods are supplied, or services provided, with effect from the date on which the tax becomes chargeable.</p>

The Decree of the Ministry of Finance 23-01-2015 was then issued and the relevant articles are:

Original text	Translation
<p style="text-align: center;">Articolo 1</p> <p>1. Alle cessioni di beni ed alle prestazioni di servizi di cui all'art. 17-ter del decreto n. 633 del 1972, effettuate nei confronti delle pubbliche amministrazioni ivi contemplate, di seguito "pubbliche amministrazioni", e per le quali tali amministrazioni non sono debitori d'imposta ai sensi della normativa in materia di imposta sul valore aggiunto, si applicano le disposizioni del presente decreto.</p> <p>2. Per le operazioni di cui al comma 1 l'imposta sul valore aggiunto è versata dalle pubbliche amministrazioni cessionarie di</p>	<p style="text-align: center;">Article 1</p> <p>1. The provisions of the this decree apply to the supplies of goods and services referred to in Article 17-ter of Decree No 633 of 1972, carried out for the benefit of the public administrations referred to therein, hereinafter referred to as "public administrations", and for which such administrations are not liable for payment of tax within the meaning of the legislation on value added tax.</p> <p>2. For the transactions referred to in</p>

<p>beni o committenti di servizi con effetto dalla data in cui l'imposta diviene esigibile.</p>	<p>paragraph 1, value added tax shall be paid by the public authorities to which the goods are supplied, or services provided, with effect from the date on which the tax becomes chargeable.</p>
<p style="text-align: center;">Articolo 2</p> <p>1. I soggetti passivi dell'IVA, che effettuano le cessioni di beni e le prestazioni di servizi di cui all'art. 1, emettono la fattura secondo quanto previsto dall'art. 21 del decreto n. 633 del 1972 con l'annotazione "scissione dei pagamenti".</p>	<p style="text-align: center;">Article 2</p> <p>1. VAT taxable persons who supply the goods and services referred to in Article 1 shall issue an invoice in accordance with the provisions of Article 21 of Decree No 633 of 1972 <b>with the annotation "split payments"</b>.</p>



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