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WORKSHOP

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AGREEMENT

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**Guide for a European CORE INVOICE data model with
UN/CEFACT CII Implementation Guideline - Part 2: European
CORE INVOICE data model**

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

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Foreword

This multi-parts CWA is the result of a project that has been carried out as a joint activity between the relevant CEN Workshops: i.e. eBES, eInvoicing-3 and BII2. The project is known as MUG (Message User guidelines).

The CWA is made up of three parts:

- Part 1: Introduction
- Part 2: European CORE INVOICE data model
- Part 3: European CORE INVOICE syntax mapping

The final CWA has been adopted by the three Workshops on the 30th of August 2011.

The current document is Part 2.

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on the 30th of August 2011, the constitution of which was supported by CEN following the public call for participation made on 24th of October 2010.

A list of the individuals and organizations which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organizations were drawn from the following economic sectors:

- Information Technology;
- Trade Facilitation, and
- Financial Services industry.

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards or legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its members.

The final review/endorsement round for this CWA was started on 1st June 2011 and was successfully closed on 31st July 2011. The final text of this CWA was submitted to CEN for publication on 1st September.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN: 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN-CENELEC Management Centre.

0 Introduction to part 2

0.1 Purpose

Part 2 of this CEN Workshop Agreement (CWA) is concerned with identifying the business requirements that should be supported with a Core Invoice and to describe a data model and business rules that would be required to support those business requirements.

0.2 Background

0.2.1 General

Electronic invoices have been exchanged between companies for 20 years to 30 years yielding great cost savings and improvements in efficiency. These implementations have however tended to be tailored for each bilateral exchange or a narrow group of trading partners. Consequently, they have required sufficient volume of invoices to be exchanged between those trading partners, to be economical. Implementations of electronic invoicing where the volume is low have been limited.

An invoice is one of the set of documents exchanged between parties in the procurement process. These documents are gradually developing into electronic documents.

When implementing electronic documents the trading partners need to agree on three main issues:

- the sequence of the documents exchanged
- the content of these documents and
- the business rules that govern the exchange.

When these issues are defined amongst a small group of trading partners, based on their specific needs it has usually been the experience that these invoices cannot be exchanged with other trading partners who were not part of original group. Consequently, each additional implementation has required some adjustments and implementation cost.

The objective of this CEN Workshop Agreement (CWA) is to enable large and small companies and organizations throughout Europe to exchange electronic invoices without using bilaterally agreed specification and implementations by specifying a Core Invoice. Following are business scenarios where such Core Invoices could be useful.

- Small, medium size buyers can implement reception of Core Invoices and write the implementation cost off against multiple sellers.
- Small, medium size sellers can offer all their buyers the option of receiving Core Invoices in a uniform way.
- Large buyers can receive Core Invoices for general operational expenses while using bespoke implementations towards large sellers.
- Large sellers with a large number of buyers who each receive few invoices may offer their buyers to receive Core Invoices.

Other opportunities that Core Invoice can provide include:

- A standardized form of electronic Core Invoices may provide opportunities for software developers to create standard software modules for electronic invoicing, lowering the cost barrier for the users. It is expected that adoption of Core Invoices will create new opportunities for optimizing internal processes in companies and organizations, creating new opportunities for software solutions and services in the IT industry at the same time as lowering operations costs in companies.
- Standardized electronic Core Invoices may create opportunities for developing various added value services for creating and processing electronic invoices. Such services may be especially interesting for small and medium sized companies as well as micro size and even private households. Such services may be provided bundled with various other services such as financial services, accounting services, telecom services etc.

0.2.2 Target users

The MUG Core Invoice is mainly intended for those who exchange invoices with many sellers/buyers but usually few invoices with each. The Core Invoice thus enables an investment in electronic invoicing to be compensated with savings in trading with many parties without requiring tailored implementation for each. It may, nevertheless, be applied to trading partners with large volume of invoices if the Core Invoice fulfils the necessary business requirements. The core invoice can be used by any entity (private or public).

It is expected that trading partners that have specific requirements may not find the core invoice to be sufficient for their use. They are however invited to use the core invoice as a starting point and make necessary bilateral or industry specific modifications that will then only apply between those parties that agree on using those modifications.

0.3 Approach

The MUG project is a joint activity by three CEN workshops (eBES, BII2 and eInvoicing3) that have been concerned with the electronic invoice in one way or another. As such the MUG project is based on existing work from the three workshops as listed in the reference section of the workshop introduction document.

The approach applied in this report includes the following steps:

- Specification of the scope of a Core Invoice, based on definition of the core invoice in the BII architecture report and the Expert Group report annex 7.
- Identification of business processes or functions that may use information that is carried in an invoice from the seller to the buyer and scoping how each process is supported in a Core Invoice.
- Identification of the relevant external requirements that affect the content of an invoice, such as legal requirements and process related requirements.
- The Core Invoice data models from the BII workshop and the Expert groups were mapped together and the intersection between the two used as a starting point. This intersection was then modified to ensure support for business requirements identified in the scoping of the Core Invoice.
- Business rules that ensure a common method of processing the information in the Core Invoice are defined based on business rules already published by the participating workshops.
- The resulting data model and business rules defined in the part 2 of this CWA are stated in general terms with the intention of being syntax neutral. Each element is given a reference ID that can be used for mapping the data model into a specific syntax. Part 3 of this CWA provides such as mapping to the UN/CEFACT Cross Industry Invoice.

1 Core invoice

1.1 Invoice

The following definition of the core business function of an invoice is used in the context of this document.

An invoice is a legal document issued by a seller, listing goods supplied and services rendered to a buyer and the amount due. Invoices can be further used as evidence of expenditure.

1.2 Clarification of CORE invoice

The Core Invoice provides data and business rules that can support business requirements of companies and organizations within the European Union and EEA.

The Core Invoice data model and business rules are aligned with similar work done in the CEN BII workshop. Note that the latter also addresses the organisational processing context that allows implementers to streamline further the business context of use between trading partners or within a procurement community.

The Core Invoice supports the subset of information that is used by most or all industries but does not support data that is specific to a particular industry. The Core Invoice does not aim to provide support for data that may be required in other regions (i.e. other than European Union and EEA). The Core Invoice provides data that supports key business processes that are relevant to general commerce within the region in scope. Emphasis is on supporting business processes and legal requirements that are concerned with processing the invoice itself as a business document but support for related processes is limited to the most common forms of those processes. It is thus NOT intended to be usable for ALL circumstances.

It is recommended that the information content and business rules for the Core Invoice, as defined in Part 2, are used as such for implementation or as the basis for further contextualization of electronic invoicing within the European Union and EEA.

It is furthermore recommended that the syntax binding, as defined in Part 3, is used as the basis for implementation of the UN/CEFACT Cross Industry Invoice (CII).

The actual content of the Core Invoice is derived from the business processes that it should support, partially or fully.

The Core Invoice scope is:

- B2B and B2G (in the message based information exchange mechanisms).
- „common“ business processes for CROSS INDUSTRY invoicing
- to enable both VAT and non-VAT invoicing.
- regional , i.e. intended for EU and EEA.

1.3 Common business processes

1.3.1 General

Stating what business practices are “common” depends on regions and industries that may have their own practices and needs, as well as on work practices within individual companies. Describing what business processes are “common” is therefore a qualitative process. This section sets out to identify what business practices can be listed as “common” and should therefore be supported by the Core Invoice. The benchmark is that the common business process is a process that is used by a wide range of companies in different industries and regions or is generally recognized as being relevant for most companies. The method for collecting is through input from the three workgroups, both existing documentation and expert review.

The invoice acts as carrier of information from a seller to a buyer. Some of this information is directly related to its core function but additionally an invoice frequently contains information that is used for related business

processes, such as quotation, order and delivery. The nature of which and details depend on the industry and bilateral business relations.

The following sub-sections identify several business processes that are frequently supported with information contained in an invoice. It is then defined whether or not - and if so, how - each process is supported in a Core Invoice.

1.3.2 Accounting

The process of assigning accounting codes to the invoice and booking it into the company accounts. The invoice must contain information that enables assigning codes for both the debit side (trade goods, cost or assets) and the credit side (payment / debt). On the debit side the invoice may be booked either on document level or by assigning different lines to different account codes. Which is the case depends on the buyers accounting methods, VAT categorization of lines and various other issues that are based on business decisions. On the credit side the booking is however almost always on the document level, i.e. payments are usually not booked by invoice lines.

Support in Core Invoice

Booking an invoice into the company account is a one of the main objectives of the invoice. A Core Invoice must contain information at document and line level that enables booking both the debit and the credit side.

1.3.3 Invoice verification

This is the process of verifying that an invoice is correct and it is part of the buyer internal business controls¹. The buyer's objective is to verify that the received invoice is in accordance with previous information and actions such as catalogue, order, contract or actual delivery information. The processes used for verifying received invoices can be grouped into three types.

- Comparing the invoice to existing internal information such as an order, a delivery document, contract, voucher, project codes etc.
- Using automated rules that act on the content of the invoice.
- Transfer the invoice to a responsible person for verification and approval.

Support in Core Invoice

Support for invoice verification is a key function of an invoice. A core invoice should provide sufficient information for looking up relevant existing documentation including.

- Preceding orders.
- Contracts.
- Buyer's reference (unqualified).
- Receipts of goods or services.

A Core Invoice should also contain information that allows the transfer of the received invoice to a responsible person or department for verification and approval. For this purpose the following information should be provided in a Core Invoice.

- Identification of the responsible person or department.

1.3.4 Inventory

Invoices may be used by the buyer for putting goods into inventory, as replacement of the more appropriate documents like despatch advice or packing lists. Such practices are less feasible with electronic invoices than multi copy paper invoices and would require the invoice to be sent before delivery.

Support in Core Invoice

Support for inventory management is not in scope for Core Invoices although it is recognized that information required by other processes, supported in the Core Invoice, may be used for putting goods into inventory.

¹ The process falls with the Class A business class as defined in CWA 16047.

1.3.5 Delivery process

Invoices may be used by the parties involved for: order picking, delivery instructions and receiving; as replacement for more appropriate documents like: instructions to dispatch, transport document or packing lists. Such practices are less feasible when using electronic invoices instead of paper invoices and would require the invoice to be issued before delivery is initiated.

Support in Core Invoice

Support for the delivery process is not in scope for Core Invoices and the use of appropriate documents is recommended.

1.3.6 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. An invoice should contain sufficient information to enable the buyer to determine whether the invoice is correct from a VAT point of view. Enough or adequate information will usually be defined by that required by the relevant tax authorities. If the right parameters are contained in the invoice file an automated calculation can be done in this respect. This also relates to the booking process, an automated booking process (both for accounting and VAT purposes) can only be established if the correct parameters appear in the invoice file.

Support in Core Invoice

Core invoices should provide support for the determination of the VAT regime and the calculation and reporting thereof in accordance with the EU directive 2006/112/EC as amended up to August 31st 2011 (including EU directive 2010/45/EU) for sales and purchase invoices, that are identified in the scope of this project, and should provide necessary elements for national legal VAT requirements that apply for invoices issued to national and foreign buyers. Core Invoices should support for 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 that are issued under reverse charge (article 194 to 199).
- Invoices for exempt intra-community supplies for which an intra-community acquisition must be done (article 200)
- Invoices for supplies outside the scope of the Directive 2006/112/EC (non-VAT invoices).

1.3.7 Auditing

Companies audit themselves or may be audited by external parties either as part of a legal obligation following from bookkeeping law or as means of internal control/follow-up. Accounting is a regular, ongoing process whereas audit is a separate review process to ensure the accounting has been carried out correctly.

The auditing process places certain information requirements on an invoice mainly for enabling traceability and authenticity.

Support in Core Invoice

Core invoices support the auditing process by providing sufficient information for the following:

- Identification of the relevant parties.
- Identification of the product and services traded, including description, value and quantity.
- Information for connecting the invoice to its settlement.
- Information for connecting the invoice to relevant documents such as contracts and orders.

1.3.8 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.

Support in Core Invoice

Core Invoices are not intended to specifically support customs clearance in general although information required by other processes supported in the Core Invoice may be used for customs purposes.

1.3.9 Payment

An invoice represents a claim for payment. The issuing 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 on the buyer to pay, in which case the invoice commonly contains information that enables the buyer, in the role of a payer, to correctly initiate the transfer of the payment, unless that information is already agreed in prior contracts.

If an invoice is issued after payment, such as when the order process included payment instruction or when paying with a credit card in online or over the phone purchases, the invoice may contain information about the payment made in order to facilitate invoice to payment reconciliation on the buyer site. An invoice may be partially paid before issuing such as when down payments are made with an order.

Support in Core Invoice

Core Invoices should identify the means of settlement for an invoice and clearly state what payment is requested. They should provide necessary details to support bank transfers in accordance with the SEPA initiative. They may provide information for relating an invoice to a payment card used for settlement. Additionally Core Invoices should support basic information for national payment systems for use in domestic trade.

Direct debits, in accordance with SEPA initiative, are out of scope for core invoices since the use of direct debits are dependant on prior contractual agreement between the buyer and the seller.

1.3.10 Marketing

Invoices may be used to deliver marketing messages to the buyer in the form of text or as images.

Support in Core Invoice

No specific marketing information is within scope of the Core Invoice.

1.3.11 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.

Support in Core Invoice

No specific reporting information is within scope of the Core Invoice itself but such information can be provided with attachments.

2 Requirements

NOTE This section identifies business requirements that apply to the Core Invoice based on the scope stated in 2.3.

2.1 High Level Requirements

- The Core Invoice must contain information elements that support business processes in accordance to the definition of the core invoice scope.
- The Core Invoice must contain information that enables efficient processing of the received invoice.
- The Core Invoice must comply with the relevant legal requirements.
- The Core Invoice information must be self-sufficient. E.g. party and product information must be given in detail in the invoice and any party and product identifiers provided are only informative.
- The Core Invoice does not impose national requirements from one country upon another but aims to provide for information that is legally mandatory for invoicing in the EU member states.

2.2 Detailed Information Requirements

Following detailed requirements are based on the above high level requirements and the Core Invoice scope. Each requirement is given an identifier for reference into the data model in section 3.2. The identifiers allow adopters of the Core Invoice to further contextualise the Core Invoice for use in their particular domain. The adoption of a particular customization would be a decision of the parties.

Core Invoice must support the following requirements. Support, in this context, means that the Core Invoice must contain elements where information needed by the requirement can be entered. Entering values into those elements in an invoice may be optional or mandatory depending on context. The terminology used in this section is “Core Invoice must support” means that element for the information must exist but may be optional; “Invoice must contain” means that the element must exist in the invoice and contain a value.

- Rq001 To control the validation and processing of an invoice; information that identifies the data model customization used and the business process that the invoice is part of.
- Rq002 Line identifiers to enable referencing from other documents such as credit notes.
- Rq003 Reference information. In line with the invoice purpose as control document; the Core Invoice must support information that is in line with the document purpose as a control document that enables the buyer to operate a process where the invoice is reviewed and accepted or rejected by comparing it to existing information. Functions in scope include: “order to invoice matching” and “contract reference”; as well as referencing to: project codes, responsible employees and other information.
- Rq004 Include attachments with invoice. It has been identified as a common requirement to be able to include attachments with invoice for example to provide timesheets, usage reports or other relevant information for reviewing the invoice. This requirement is based on the document purpose as control document.
- Rq005 Party and item identifiers. Use of published identifiers is common for identifying parties or products. Parties should be free to choose the identification scheme.
- Rq006 Registered product numbers². It is identified as common business practice that sellers identify their items with registered product numbers. This number identifier is commonly used for cross-referencing information in other documents such as catalogues, orders and offers. The term ‘product number’ is also commonly used to describe alphanumeric string identifiers. Both numeric and alphanumeric string identifiers must be supported.
- Rq007 Seller contact names, contacting details, departments etc. A Core Invoice must support information that facilitates the review of the invoice by: transferring it to the relevant location within the receiving company and to enable the invoice buyer to contact the seller for clarifications.

² Registered product number are numbers that are issued by an responsible entity which makes them available to multiple users trough a service. Examples of such numbers are the GTIN number from GS1.

Information items that must be supported in the Core Invoice are: contact names, contacting details, departments.

- Rq008 Accounting code or project cost codes. For automating the booking of invoices into the buyers account the invoice must support the relevant accounting code or project cost codes.
- Rq009 SEPA payment systems. Invoices commonly contain information on how they should be paid. There are multiple ways of settling invoices but the Core Invoice supports international bank transfers according to the SEPA specification by supporting information about a bank account IBAN id and the financial institution BIC code.
- Rq010 Payment references. The SEPA payment specification encourages the invoice issuers to include a payment reference in the invoice and request the payer to use that reference in the payment initiation message. This enables automation of payment-to-invoice matching when reconciling account statements.
- Rq011 Payment terms. Invoices commonly have payment terms such as penalty charges if not paid on due date. The Core Invoice must support such information in unstructured form.
- Rq012 Commodity classifications codes. The use of commodity classifications codes is being promoted in electronic documents to support automation in processes such as allocating account codes and comparing prices. Examples of codes used are UNSPSC and eClass.
- Rq013 Item attributes. Invoices commonly contain additional information about item attributes such as: sizes, colour etc.; when units with different attributes are not identified with unique product identifiers. This information is relevant when stocking items and comparing to deliveries. Additionally, depending on the nature of the item, the attribute may be used for automatically deriving account codes. For example; by defining phone numbers or meter number as attributes on an item the relevant cost centre can be identified.
- Rq014 Detailed pricing information. Provide details of how a price of an item has been calculated. The information supported must include the list price and discount.
- Rq015 List prices and discounts. It is considered to be common practice to show list prices and discounts on prices in invoices in order to assist with discounts and for verification of negotiated terms.
- Rq016 Addresses. As well as being common business practice it is a legal requirement (both in EU directives and national laws) to include address information for the seller and the buyer in an invoice. Exactly what address details are required is however not defined in these legal requirements and common practices are different. It also differs between countries whether location identifiers are allowed for this purpose. For the purpose of interoperability the Core Invoice must support the following basic address information:
- Street name (two lines) and building number or P.O. Box
 - City name and postal code
 - Region
 - Country
- Rq017 Allowances and Charges with corresponding VAT details. The Core Invoice must support information needed to specify allowance and charges and their VAT details on document level in an invoice, e.g. for packing and shipping charges that apply to the invoice as a whole.
- Rq018 Delivery address. A Core Invoice must support delivery address information and identifier in order to enable the buyer to identify where the invoiced items were delivered, for controlling purposes.
- Rq019 EU directive on reverse charges. A core invoice must support reverse charge invoices which are those where the seller does not charge VAT in the invoice but instead the buyer settles the VAT according to the VAT rules that apply in the Member State where the supply takes place. EU directive 2006/112/EC, 194 – 199a.
- Rq020 EU directive on Intra-community acquisitions. Core invoices must support necessary information for Intra-community acquisition in accordance with EU directive 2006/112/EC, article 200.
- Rq021 The Core Invoice is a commercial invoice. It is a legal requirement in some countries that the invoice document is specifically identified as being a commercial invoice, as opposed to other forms of invoices such as pro-forma, customs invoice etc. that serve a different purpose and are not valid as accounting documents or as claim for payment.

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- Rq022 National registry identifiers for parties. Some countries have a legal requirement that an invoice party must be identified by using his national registry identifier (legal identity).
- Rq023 Country of Delivery. If country of delivery is different from the sellers address it may affect the VAT jurisdiction for the invoice. A Core Invoice must therefore support information about the country of delivery.
- Rq024 EU directive on invoice content. A core invoice must support information needed to comply with the EU directive 2006/112/EC, article 226 which defines the required content of a VAT invoice.

The following data requirements for VAT are identified in the article. (the text in this list is amended and shortened from the full text in the directive):

- The date of issue
- A sequential number, based on one or more series, which uniquely identifies the invoice
- The seller's VAT identification number
- The buyer's VAT identification number (when the buyer is liable to pay the VAT)
- The seller's and the buyers full name and address.
- Quantity and nature of the goods or services supplied or the extent and nature of the services rendered.
- The date of the supply or payment was made or completed if different from the date of invoice.
- The taxable amount per rate or exemption, the unit price exclusive of VAT and any discounts or rebates if they are not included in the unit price.
- The VAT rate applied.
- The VAT amount payable, except where a special arrangement is applied under which, in accordance with the directive, such detail is excluded.
- In the case of an exemption or where the customer is liable for payment of VAT, reference to the applicable provision of the directive.

Information required when tax representatives are used is not supported in the Core Invoice but can be added to the Core Invoice by mutual agreement between a buyer and seller.

- Rq025 Total amounts. The calculation of an invoice total amount must show the relevant sums of lines, sum of VAT and the invoice totals with and without VAT. The invoice must also show what amount is due for payment. The interaction between the different totals must be defined to ensure that all costs are included in the invoice totals once and only once.
- Rq026 Deposits and prepayments. It must be possible to issue an invoice that is paid with a financial transaction in a way that the value of the purchase is clearly stated at the same time and it is clear that no payment is due. Invoices can also be partially paid with deposits (e.g. in the case of down payments on orders) in which case the amount due for payment is less than the full amount of the purchase.
- Rq027 VAT in another currency. In cases when invoices are issued in other currencies than the national currency of the seller, the seller may be required to provide information about the VAT total amount in his national currency.
- Rq028 Invoice currency. The Core Invoice must contain information about the currency of the invoice. The currency code for the invoice as a whole controls the rules that regulate which amounts in a Core Invoice must be in the same currency to make the calculation of the invoice totals possible.
- Rq029 Comments, clauses, statements (e.g. of country of origin) and notes at invoice and line level must be supported in the Core Invoice. It is recognized that when issuing invoices there may be different needs to state information that does not have qualified elements and is not necessarily intended for automatic processing. Examples may be references to buyer's special purchasing codes, remarks regarding deviation in delivery or other issues that may be of importance. Since the Core Invoice must not require an electronic interchange agreement between the buyer and seller the Core Invoice provides flexibility by supporting textual notes at document and line level.
- Rq030 Financial institution and branch identifiers. It is recognized that in some countries within Europe financial institutions may be identified with branch identifiers rather than financial institution identifiers. It is also recognized that in such cases the accounts id used may be proprietary, i.e. not IBAN.

- Rq031 Details of payment cards used. Invoices may be paid with payments cards (e.g. online purchases) in which case it is of benefit for the payer to identify what payment card was used so that he can more easily reconcile the invoice against the payment card statements.
- Rq032 Due date for payment. Invoices represent a claim for payment and the invoice may have to state the due date for the payment when that is not defined in contracts between the buyer and seller.
- Rq033 Order line identification. To facilitate automation in matching invoices against orders (especially when orders are partially invoiced) it is necessary to identify the order line to which an invoice line relates.
- Rq034 Seller's item identifiers. For the purpose of enabling matching against catalogue information, for enabling booking rules for repeated purchases, and for general reference to an item; the sellers item identifier must be supported on line level in the Core Invoice.
- Rq035 Country of origin. Within scope of the Core Invoice is trade across borders within EU and the EEA where customs processing may be required. Statement of country of origin and related declarations in a Core Invoice allows the buyer and the seller to determine whether customs procedures and additional related information is required through other means. In accordance with EU customs regulations an "invoice declaration of origin" should include on each item line the country of origin of the product and a specific declaration in the document level textual note.
- Rq036 Rounding of the invoice total. Showing the rounding amount for invoice totals is common in some countries. The use of such rounding must be supported in the Core Invoice and the calculation rule for the invoice. Rounding amount of invoice total must remain optional.
- Rq037 Electronic address. The Core Invoice must support information about the parties' electronic address, as part of party information.
- Rq038 It is identified as a requirement that a seller may need to state in an invoice what his registered status is. This information may affect how the buyer settles the payment. E.g. in some countries, if the seller is not registered as tax paying entity then the buyer is required to withhold the amount of the tax and pay it on behalf of the seller.

3 Logical Information Model

NOTE This chapter details the logical information model that supports the requirements identified in chapter 3.2.

3.1 Design Principles

When defining the data model for the core invoice the following design principles were followed as much as practical.

- To facilitate interoperability in low volume exchange.
- To facilitate adoption by keeping implementation requirements to a minimum (i.e. validation to schemas, multiplicity in classes).
- To facilitate automation in the processing of an invoice, invoice review and booking into accounts.

3.2 Data model

Based on the requirements identified in section 2.2 the following data model is defined. The data model lists the information that a Core Invoice must or may contain. The information is not grouped by types e.g. addresses, except when the existence of information is dependent on other information. For example; if a Core Invoice contains invoice period then certain details must be provided; or, for each invoice line certain information must be provided.

The columns in the table are used in the following way:

DataID	Links the generic data model specification to the syntax mapping in Part 3 of this CWA.
Element name	A general name for the element. The terms used in this section may or may not be identical to the comparable terms used in a relevant syntax element.
Cd	Specifies whether the seller in the invoice is required to provide information in the element (1..1) or whether its use is an option for him (0..1). Cd also shows whether the seller is allowed to use optional elements only once or multiple times (0..n or 1..n)
Rule	Reference to a business rule that controls the value in the element. The relevant rule is defined in section 4 of this part 2 of the CWA.
Rationale and use	A rationale for why the element is included in the core invoice and how it is used.
Ref	Reference back to the requirement that drives that data element and is described in section 3.2

NOTE An additional clarification for the element. The notes are listed at the end of the table.

If an information element has cardinality 1..1 or 1..n then the seller must include that information in every Core Invoice and the buyer can always expect to receive that information. If an information element has cardinality 0..1 or 0..n then the seller may, as an option, put that information in a Core Invoice and he can expect the buyer to acknowledge that information.

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
INV001	0..1	Customization identifier		Identifying the customization/implementation guide/contextualization of the syntax message and its extension that applies to the invoice transaction, enables the buyer to apply the correct validation to the received document as well as to route the document to an appropriate service for processing.	Rq001	
INV002	0..1	Business process identifier		Identifying the profile or business process context in which the transaction appears enables the buyer to direct the message to an appropriate service as well as controlling its relation to other documents exchanged as part of the same process.	Rq001	
INV078	0..1	Message transaction identifier		The message transaction identifier makes it	Rq001	

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
				possible to link the Core Invoice instance to any other messages that are part of the same process instance.		
INV080	0..1	Invoice type code	1	A code that identifies that the Core Invoice is a commercial invoice.	Rq021	2
INV003	1..1	Invoice identifier		A Core Invoice must contain an identifier. The identifier enables positively referencing the document instance for various purposes such as to documents that are part of the same process.	Rq024	
INV004	1..1	Invoice issue date		The issue date of an invoice is required by EU directives as well as country laws. A Core Invoice must therefore contain the date on which it was issued.	Rq024	
INV005	0..1	Document level textual note		The textual note provides the seller a means for providing unstructured information that is relevant to the invoice. This can be notes or other similar information that is not contained explicitly in another qualified element. Information given in as textual notes is mainly intended for manual processing. When "invoice clauses" or "declarations" are used they should be stated in full in the note element.	Rq029 Rq035	3
INV007	1..1	Invoice currency code	6	The currency in which the monetary amounts are stated must be stated in the Core Invoice.	Rq028	
INV008	0..1	Buyers accounting string		The Core Invoice may contain a reference to the buyer's accounting code applied to the Core Invoice as a whole, expressed as text rather than a code in order to facilitate automation in booking into accounts following an order to invoice transformation.	Rq008	
	0..1	Invoice period information		For invoices that charge for services or items delivered over a time period, such as subscriptions or metered services, a Core Invoice may contain information about the date period to which the invoice applies.	Rq024	
INV009	1..1	Invoice period start date		When invoice period is given in a Core Invoice it must include the period start date.	Rq024	
INV010	1..1	Invoice period end date		When invoice period is given in a Core Invoice it must include the period end date.	Rq024	
INV082	0..1	Buyers reference identifier		When purchasing, a buyer may give a reference identifier to the seller and request the seller to state it on the invoice. The meaning of the reference may have no relevance for the seller since it is issued by the buyer, who is the receiver of the invoice. Consequently it does not have to be qualified.	Rq003	
INV011	0..1	Order identifier		To facilitate order–invoice matching a Core invoice may contain an identifier of an order (issued by the buyer) that the invoice relates to. A core invoice may only reference one order.	Rq003	2
INV012	0..1	Contract identifier		To positively identify relevant contractual issues the invoice may contain an identifier of a contract that applies to the invoice.	Rq003	
INV083	0..1	Contract type, text		A Core Invoice may contain the type of contract that is referred to (such as framework agreement)	Rq003	
INV084	0..1	Contract type, coded		A Core Invoice may contain the type of contract that is referred to (such as framework agreement) in a coded way to enable automated processing	Rq003	

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
				based on the contract type.		
INV013	0..1	Attached binary object	11	A Core Invoice may contain an attached electronic document as an encoded object in the invoice in order to provide supporting documents such as timesheets, usages reports etc. The seller can only expect the receiver to process attachments according to the rule.	Rq004	
INV085	0..1	Seller registered identifier		A Core Invoice may contain a registered identifier for the seller. Information referenced by the identifier is not considered part of the message (i.e. the buyer is not required to look up the identifier in the relevant registry and process additional information)	Rq005	1
INV014	1..1	Seller name		A Core Invoice must contain the name of the seller.	Rq024	
INV015	1..1	Seller address line1		A Core Invoice must contain the seller's street name and number or P.O.box.	Rq016 Rq024	
INV086	0..1	Seller address line2		A Core Invoice may contain an additional address line for seller address.	Rq016 Rq024	
INV016	1..1	Seller address city		A Core Invoice must contain the seller's city.	Rq016 Rq024	
INV017	0..1	Seller address post code		A Core Invoice may contain the seller's post code.	Rq016 Rq024	
INV018	0..1	Seller address country sub division		In some countries regions or other type of country sub divisions are commonly used. A core invoice may contain that information.	Rq016 Rq024	
INV019	1..1	Seller address country code		The seller's address country must be contained in a Core Invoice in the form of a two letter code (ISO 3166-1 alpha-2).	Rq016 Rq024	
INV020	0..1	Seller VAT identifier	3, 4, 5	When the Core Invoice is a VAT invoice it must state the sellers VAT registration number and tax scheme.	Rq024	
INV021	0..1	Seller legal registration identifier		A Core Invoice may contain the identifier assigned to the party by the national company registrar.	Rq022	
INV097	0..1	Seller electronic address		A Core Invoice may contain the sellers electronic address. The address can be of any format and the format should be identified in the message.	Rq037	
INV098	0..1	Seller tax registration status		A Core Invoice may contain a textual identifier or code that enables the seller to state his registered status for tax purposes.	Rq038	
INV022	0..1	Seller contact telephone number		A Core Invoice may contain a telephone number for a relevant contact at the seller.	Rq007	
INV023	0..1	Seller contact fax number		A Core Invoice may contain a tele-fax number for a relevant contact at the seller.	Rq007	
INV024	0..1	Seller contact email address		A Core Invoice may contain an e-mail address for a relevant contact at the seller.	Rq007	
INV025	0..1	Seller contact person name		A Core Invoice may contain a person name for a relevant contact at the seller.	Rq007	
INV087	0..1	Buyer registered identifier		A Core Invoice may contain a registered identifier for the buyer. Information referenced by the identifier is not considered part of the message (i.e. The buyer is not required to look up the identifier in the relevant registry and process additional information)	Rq005	1

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
INV026	1..1	Buyer name		A Core Invoice must contain name of the buyer.	Rq024	
INV027	1..1	Buyer address line1		A Core Invoice must contain the buyer's street name and number or P.O. box.	Rq016 Rq024	
INV088	0..1	Buyer address line2		A Core Invoice may give an additional address line for buyer's address.	Rq016 Rq024	
INV028	1..1	Buyer address city		A Core Invoice must contain the buyer's city.	Rq016 Rq024	
INV029	0..1	Buyer address post code		A Core Invoice may contain the buyer's post code.	Rq016 Rq024	
INV030	0..1	Buyer address country sub division		In some countries regions or other type of country sub divisions are commonly used. A Core Invoice may contain that information.	Rq016 Rq024	
INV031	1..1	Buyer address country code		The buyer's address country must be given in a Core Invoice in the form of a two letter code (ISO 3166-1 alpha-2).	Rq016 Rq024	
INV032	0..1	Buyer VAT identifier	4, 5	A Core Invoice for reverse charge and intra community supply invoicing must contain the buyers VAT identifier.	Rq019 Rq020 Rq024	
INV033	0..1	Buyer legal registration identifier		A Core Invoice may contain the identifier assigned to the Party by the national company registrar.	Rq022	
INV099	0..1	Buyer electronic address		A Core Invoice may contain the buyers electronic address. The address can be of any format and the format should be identified in the message.	Rq037	
INV034	0..1	Buyer contact telephone number		A Core Invoice may contain the telephone number for a relevant contact at the buyer.	Rq007	
INV035	0..1	Buyer contact fax number		A Core Invoice may contain the tele-fax number for a relevant contact at the buyer.	Rq007	
INV036	0..1	Buyer contact email address		A Core Invoice may contain an e-mail address for a relevant contact at the buyer.	Rq007	
INV037	0..1	Buyer contact person name		A Core Invoice may contain a person name for a relevant contact at the buyer.	Rq007	
INV038	0..1	Delivery date		A Core Invoice may contain the actual delivery date on which goods or consignments are delivered from the seller. Also applicable for service completion date.	Rq024	
INV100	0..1	Delivered to location identifier		A Core Invoice may contain an identifier for the location to which the items where delivered.	Rq005	1
INV101	0..1	Delivered to address line1		A Core Invoice may contain the address to which the items where delivered.	Rq018	
INV102	0..1	Delivered to address line2		A Core Invoice may contain an additional address line in the delivered to address.	Rq018	
INV103	0..1	Delivered to address city		A Core Invoice may contain the name of the city to which the items where delivered.	Rq018	
INV104	0..1	Delivered to address post code		A Core Invoice may contain the post code to which the items where delivered.	Rq018	
INV105	0..1	Delivered to address country sub division		In some countries regions or other type of country sub divisions are commonly used. A Core Invoice may contain the country sub division to which the items where delivered.	Rq018	
INV039	0..1	Delivery country		Since delivery country may affect VAT issues A Core Invoice may contain the country to which the	Rq023 Rq018	

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
				items were delivered.		
INV040	0..1	Payment means type	7, 10	A Core Invoice may contain an indication about how the payment should be handled.	Rq009 Rq031	
INV041	0..1	Payment due date		A Core Invoice may contain the date on which payment is due.	Rq032	
INV042	0..1	Sellers payment identifier		A Core Invoice may contain an identifier for the payment, issued by the seller as reference. Also known as end-to-end payment reference.	Rq010	
INV043	0..1	Account identifier	7, 10	To enable the buyer to issue a payment initiation to his bank the invoice may contain the identifier for the financial account either as IBAN or in proprietary format. This is the seller (as payee) account number except when payment type is card (code 48) when this is the buyers card number.	Rq009 Rq030 Rq031	
INV044	0..1	Sellers financial institution branch identifier		The identifier for a branch or division of an organization may, in some countries, be used to positively identify the location of the account or supplement the financial institution identifier.	Rq030	
INV045	0..1	Financial institution identifier		A Core Invoice may contain the ISO 9362 BIC (Bank Identification Code) of a financial institution.	Rq009 Rq031	
INV046	0..1	Payment terms		A Core Invoice may contain textual description of the payment terms that apply to the invoice due amount. E.g. penalty charges or intended collection procedures.	Rq011	
	0..n	Document level allowance or charge details		A Core Invoice may contain information about one or more allowance or charge on document level. For each allowance or charge specific information must be given.	Rq017	
INV047	1..1	Document level allowance or charge amount	2, 3, 6, 7, 9	For each allowance or charge a Core Invoice must contain the amount. Allowances are subtracted from the total invoice amount and charges are added to the amount. The amount is "net" without VAT.	Rq017	
INV048	0..1	Allowance and charges VAT category	3	A Core Invoice may contain information about one VAT category for each allowances and Charges on document level.	Rq017	
INV091	1..1	Allowance and charges reason text		One textual description of what is being added or deducted. E.g. „volume discount" or "packing charges" must be stated for each allowance and charge on document level in a Core Invoice.	Rq017	
INV092	0..1	Allowance and charges reason code		A Core Invoice may contain a coded description of what is being added or deducted. E.g. „volume discount" or "packing charges", for each allowance or charge.	Rq017	
INV049	0..1	VAT total amount	6, 7, 9	A Core Invoice may contain the total VAT amount. This amount is the sum of each sub total for each VAT rate.	Rq024	
INV093	0..1	VAT total amount in local currency	6	A Core Invoice may, in cases when invoices are issued in currencies other than the national currency for VAT reporting, contain the VAT amount in the local currency.	Rq027	
	0..n	VAT category details		A Core Invoice may be a VAT invoice in which case it must contain certain information details for each VAT rate and exemption, identified with a category code in a Core Invoice.		

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
INV050	1..1	VAT category taxable amount	3, 6, 7, 9	For each VAT category a Core invoice must contain the amount to which VAT percent (rate) is applied to calculate the VAT sub total amount for that category.	Rq024	
INV051	1..1	VAT category tax amount	3, 6, 7, 9	For each VAT category a Core Invoice must contain the amount of VAT for that category.	Rq024	
INV052	1..1	VAT category code	3, 4, 5	Each VAT category a Core Invoice must be identified with a code.	Rq024 Rq019 Rq020	
INV096	1..1	VAT category percentage	3, 9	For each VAT category a Core Invoice must contain the VAT percentage for each sub total taxable amount so that it can be used to calculate the VAT amount. Where VAT category code is stated then VAT category percentage must also be stated.	Rq024	
INV053	0..1	VAT exemption reason text	3	A Core Invoice may contain, as text, the reasons for why a value amount in a category is exempted from VAT. Core Invoices only support one category with an exemption reason pr. Invoice.	Rq024	
INV054	1..1	Sum of line amounts	2, 6, 7, 9	A Core Invoice must contain the sum of all line amounts. The amount must be exclusive of VAT but inclusive of allowances or charges applied to the lines as well as taxes, other than VAT.	Rq025	
INV055	1..1	Invoice total without VAT	2, 3, 6, 7, 9	A Core Invoice must contain the total amount of the invoice, including document level allowances and charges but exclusive of VAT.	Rq025	
INV056	1..1	Invoice total with VAT (value of purchase)	2, 3, 6, 7, 9	A Core Invoice must contain the total amount of the invoice inclusive VAT. I.e. the total value of the purchase irrespective of payment status.	Rq025 Rq026	
INV057	0..1	Sum of Allowances on document level	2, 6, 7, 9	A Core Invoice may contain the total amount of all allowances given on document level. Line allowances are included in the net line amount.	Rq025	
INV058	0..1	Sum of Charges on document level	3, 6, 7, 9	A Core Invoice may contain the total amount of all charges given on document level. Line charges are included in the net line amount.	Rq025	
INV059	0..1	Paid amounts	2, 6, 7, 9	A Core Invoice may contain the sum of all prepaid amounts that must be deducted from the payment of this invoice. For fully paid invoices (cash or card) this amount equals the invoice total.	Rq025 Rq026	
INV060	0..1	Rounding of Invoice total	2, 6, 7, 9	A Core Invoice may contain the rounding amount (positive or negative) added to the invoice to produce a rounded invoice total.	Rq025 Rq036	
INV061	1..1	Amount due for payment	2, 6, 7, 9	A Core Invoice must contain the total amount to be paid that is due. If the invoice is fully paid i.e. cash or card, the due amount for the invoice is zero.	Rq025 Rq026	
	1..n	Invoice line		A Core Invoice must contain at least one invoice line and each line must or may contain information as follows.		

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
INV062	1..1	Invoice line identifier		Each line in a Core invoice must contain an identifier that is unique within the document to make it possible to reference the line. For example, from other documents like credit notes and in disputes.	Rq002	
INV063	0..1	Line textual note		Each line in a Core Invoice may contain a free-form text. This element may contain notes or any other similar information that is not contained explicitly in another structure. Clauses or declarations that refer to a particular line should be entered in full as notes.	Rq029	
INV064	1..1	Invoiced quantity	9	Each line in a Core Invoice must contain the invoiced quantity. The quantity may be negative e.g. in case of returns.	Rq024	
INV094	1..1	Quantity Unit of measure		Each line in a Core Invoice must contain the unit of measure that applies to the invoiced quantity.	Rq024	
INV065	1..1	Invoice line net amount	2, 6, 7, 9	Each line in a Core Invoice must contain the total amount of the line. The amount is "net" without VAT, i.e. inclusive of line level allowances and charges as well as relevant taxes, except VAT which must be excluded from the amount.	Rq025	
INV066	0..1	Invoice line to order line reference		Each line in a Core Invoice may contain a reference to the relevant order line in the order that is identified on the document level in the invoice.	Rq033	2
INV068	1..1	Invoice line item name		Each line in a Core Invoice must contain the name of the invoiced item.	Rq024	
INV069	0..1	Invoice line item sellers identifier		Each line in a Core Invoice may contain the seller's identifier for an item.	Rq034	
INV070	0..1	Invoice line item registered identifier		Each line in a Core Invoice may contain a registered item identifier.	Rq006	1
INV071	0..2	Invoice line item commodity classification		Each line in a Core Invoice may contain classification codes used to classify the type or nature of the Item. The seller can only expect the buyer to acknowledge two classifications. Allowing for the use of a general classification code such as UNSPSC and a specific one such as CPV in the same line.	Rq012	
INV072	0..1	Invoice line VAT category code		Each line in a Core Invoice may contain the VAT category/rate used for this invoice line. The category code acts as a key for summing up line amounts pr. VAT category as well for relating the VAT category percentage given on document level, to the line. If the invoice is a VAT invoice each line must contain a category code.	Rq025	
INV073	0..n	Item attribute		Each line in a Core Invoice may contain attribute for the item. For example colour, size, meter numbers. This information supports automatically assigning accounting codes and matching to orders and receiving documents.	Rq013	
INV095	0..1	Item country of origin		Each line in a Core Invoice may contain the items country of origin. When relevant this allows the buyer to identify whether further customs procedures are required.	Rq035	
INV075	0..1	Invoice line item net price	6, 7, 8, 9	Each line in a Core Invoice may contain the net price of the item including all allowances or charges that directly relates to price (e.g. discount), and taxes but excluding VAT.	Rq014 Rq024	

DataID	Cd	Element name	Rule	Rationale and use	Ref	Note
INV076	0..1	Invoice line item price discount	6, 7, 8, 9	Each line in a Core Invoice may contain the amount of the price discount. The price discount amount is informative.	Rq014 Rq015	
INV077	0..1	Invoice line item gross price	6, 7, 8, 9	Each line in a Core Invoice may contain the gross price, e.g. List price for the item.	Rq014 Rq015	

NOTE 1 Parties and items may be identified by using registered identifiers (e.g. GLN, D.U.N.S or GTIN). The registry information for those identifiers may contain details about the party or the item. Such details are not considered part of the Core Invoice. This means that the buyer is not required to retrieve those details from the registry.

NOTE 2 A Core Invoice only supports one order reference in each invoice and consequently order line references provided on line level apply to the order referenced on document level. This does not prevent partial invoicing of an order.

NOTE 3 Invoice declaration of Country of Origin. Approved text of the declaration:

- German version
Der Ausführer (Ermächtigter Ausführer; Bewilligungs-Nr. ...) der Waren, auf die sich dieses Handelspapier bezieht, erklärt, dass diese Waren, soweit nicht anders angegeben, präferenzbegünstigte ... Ursprungswaren sind.
- English version
The exporter of the products covered by this document (customs authorisation No ...) declares that, except where otherwise clearly indicated, these products are of ... preferential origin.
- French version
L'exportateur des produits couverts par le présent document [autorisation douanière no ...] déclare que, sauf indication claire du contraire, ces produits ont l'origine préférentielle...

4 Business rules

NOTE The following business rules are specified for the Core Invoice.

4.1 General rules (rules 1)

General rules apply to the Core Invoice document as a whole and its use in trade.

- An electronic Core Invoice identified as commercial invoice (type code 380) represents a legal claim for payment.
- Payment means and terms stated at document level apply to the Amount due for payment (INV061).
- Accounting details stated at document level must apply to all invoice lines.
- VAT information stated at document level must apply to all invoice lines.
- Stated paid amounts must apply to the invoice as whole but not individual line items.

4.2 Calculation of invoice total (rule 2)

Rule 2

To facilitate the processing of Core Invoices into ERP systems the calculation of each amount and their relations is defined. The following calculation model applies to document level totals.

Variable in calculation	Sample amounts
+ Sum of line amounts (INV054)	321.82
- Sum of Document level allowance amounts (INV057)	9.20
+ Sum of Document level charge amounts (INV058)	7.60
= Invoice total without VAT (INV055)	320.22
+ VAT total amount (INV049)	40.25
+ Rounding of invoice total (INV060)	-0.47
= Invoice total with VAT (value of purchase) (INV056)	360.00
- Paid amounts (INV059)	120.00
= Amount due for payment (INV061)	240.00

Validation statements

- Invoice Sum of line amount (INV054) MUST be the equal to the Sum of all Invoice line net amounts (INV065).
- Invoice total without VAT (INV055) MUST equal the Sum of line amounts (INV054) plus Allowances on document level (INV057) and minus Charges on document level (INV058).
- Invoice total with VAT (INV056) MUST equal the Invoice total without VAT (INV055) plus the total VAT (INV049) and plus the Rounding of invoice total amount (INV060).
- If a Document level allowance amount (INV047) exists in an invoice, Allowances on document level amount (INV057) MUST be equal to the sum of all Document level allowance amounts (INV047)
-
- If a Document level charge amount (INV047) exists in an invoice, Charges on document level amount (INV057) MUST be equal to the sum of all Document level charge amounts (INV047)
- Amount due for payment (INV061) MUST be equal to the Invoice total with VAT (value of purchase) (INV056) minus Paid amounts (INV059).

4.3 Calculation of VAT (rule 3)

Rule 3

- The line amount (INV065) is the VAT taxable amount for each line.
- VAT exempted lines are identified with a VAT category code that carries zero percentage (0.00) and are reflected in the VAT subtotal in an identical way as zero rated items and with an exemption reason.
- For each VAT category code used on line level VAT sub-category details must be provided on document level.
- A Core Invoice containing VAT must have the sellers VAT identification.
- A Core Invoice VAT total MUST refer to a single tax scheme.

Validation statements

- The VAT taxable amount in each VAT sub-category on document level (INV050) MUST equal the sum of line amounts (INV065) and of allowances and charges on document level (INV047) for each VAT category code.
- The sum of VAT category taxable amounts (INV050) MUST equal the Invoice total without VAT amount (INV045).
- The VAT category tax amount (INV051) MUST equal the VAT category taxable amount (INV050) multiplied by the VAT category percentage (INV096).
- The VAT total amount (INV049) MUST equal the sum of the subcategory VAT category tax amounts (INV051).
- IF VAT total amount (INV049) IS NOT zero (0.00) THEN the Seller VAT identifier (INV020) MUST exist.

Example

An invoice has the following line details (example values are arbitrary). In this example the items sold carry three different VAT percentage rates one of which is zero. There is also a line which is exempted as well as a charge on document level that carries VAT.

Line	Line amount (a)	VAT category (b)
1	125	T01
2	24	T02
3	136	T01
4	95	T02
5	100	O
6	10	E

The same invoice has the following details on document level.

Allowance/Charge	AC amount (a)	VAT category (b)
Charge	20	T01

Based on this the invoice has the following information on document level.

VAT sub category T01 (Taxed at rate level 1)

VAT Taxable amount (c) = Sum line and AC amounts (a) where VAT category (b) equals T01 = 281

VAT rate percentage = 20.00

VAT amount (d) = $c * 20/100 = 56.20$

VAT sub category T02 (Taxed at rate level 2)

VAT Taxable amount (c) = Sum line and AC amounts (a) where VAT category (b) equals T02 = 119

VAT rate percentage = 10.00

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$$\text{VAT amount (d)} = c * 10/100 = 11.90$$

VAT sub category O (Outside scope of tax)

$$\text{VAT Taxable amount (c)} = \text{Sum line and AC amounts (a) where VAT category (b) equals T03} = 100$$

$$\text{VAT rate percentage} = 0.00$$

$$\text{VAT amount (d)} = c * 0/100 = 0.00$$

Note that VAT rate 0% is applied for calculation purposes even if item is outside scope of VAT.

VAT sub category E, VAT exempt

$$\text{VAT Taxable amount (c)} = \text{Sum line and AC amounts (a) where VAT category (b) equals E} = 10$$

$$\text{VAT rate percentage} = 0.00$$

$$\text{VAT amount (d)} = c * 0/100 = 0.00$$

For this category an exemption reason SHOULD be given.

$$\text{VAT total} = \text{sum (d)} = 68.1$$

Verification: Invoice total w/o VAT = sum of VAT taxable amounts (c) for all VAT categories = 510

4.4 Reverse charge VAT (rule 4)

Rule 4

An issuer of an invoice is required to indicate when an invoice is a reverse charge invoice. For simplification a Core Invoice can only be reverse charge invoice as a whole. Partial reverse charge Core Invoices where VAT is charged on some lines are not allowed and the taxable amount for reverse charge VAT must therefore equal the invoice total amount with VAT.

A Core Invoice applies this by using the VAT category AE from code list CEN MUG1 CCII-1 2011-5 in the document level of the invoice. Consequently when the AE code is used in an invoice, other category identifiers may not be used in the same invoice and the taxable amount that applies to the AE VAT subtotal must equal the invoice tax exclusive total. It is optional to provide line level categorization in reverse charge invoices.

In the electronic invoice existence of the code AE constitutes a declaration that the invoice is a reverse charge invoice and can be used as criteria for rendering a visual textual note when that is required.

It is the responsibility of the seller to issue an invoice as a reverse charge invoice when required. The following rules do not verify if that decision is correct. They only check whether the information is correctly stated in the invoice.

Validation statements

- A Core Invoice that contains VAT category code (INV052) with code value "AE" MUST contain Sellers VAT identification (INV020) AND Buyer VAT identification (INV032).
- A core invoice that contains a VAT category (INV052) with code value "AE" MUST NOT contain other VAT categories.
- The VAT category taxable amount (INV050) for a VAT category with VAT category code (INV052) as "AE" MUST equal the Invoice total without VAT (INV055).
- The VAT category tax amount (INV051) for category "AE" MUST equal zero (0.00).
- Since there is only one VAT category allowed it follows that the invoice VAT total amount (INV049) for reverse charge invoices is zero (0.00) and Invoice total with VAT (INV056) equals Invoice total without VAT (INV055).

4.5 Intra community Supply (rule 5)

Rule 5

An issuer of an invoice is required to indicate when an invoice is an intra community supply invoice. For simplification a Core Invoice can only be invoice is an intra community supply invoice as a whole. Partial

invoice is an intra community supply Core Invoices where VAT is charged on some lines are not allowed and the taxable amount for intra community supply VAT must therefore equal the invoice total amount with VAT.

A Core Invoice applies this by using the VAT category "IC" from code list CEN MUG1 CCII-1 2011-5 in the document level of the invoice. Consequently when the "IC" code is used in an invoice, other category identifiers may not be used in the same invoice and the taxable amount that applies to the "IC" VAT subtotal must equal the invoice tax exclusive total. It is optional to provide line level categorization in intra community supply invoices.

In the electronic invoice existence of the code "IC" constitutes a declaration that the invoice is an intra community supply invoice and can be used as criteria for rendering a visual textual note when that is required.

It is the responsibility of the seller to issue an invoice as invoice is an intra community supply invoice when required. The following rules do not verify if that decision is correct. They only check whether the information is correctly stated in the invoice.

Validation statements

- A Core Invoice that contains VAT category code (INV052) with code value "IC" MUST contain Sellers VAT identification (INV020) AND Buyer VAT identification (INV032).
- A core invoice that contains a VAT category (INV052) with code value "IC" MUST NOT contain other VAT categories.
- The VAT category taxable amount (INV050) for a VAT category with VAT category code (INV052) as "IC" MUST equal the Invoice total without VAT (INV055).
- The VAT category tax amount (INV051) for category "IC" MUST equal zero (0.00).
- Since there is only one VAT category allowed it follows that the invoice VAT total amount (INV049) for intra community supply invoices is zero (0.00) and Invoice total with VAT (INV056) equals Invoice total without VAT (INV055).

4.6 Invoice currency (rule 6)

Rule 6

In order to make it possible to calculate the totals of a Core Invoice without considering currency exchange rates all amounts that are part of the invoice calculation must be in the invoice currency.

Following amounts MUST NOT be negative:

- Document level allowance and charge amount (INV047)
- VAT category taxable amount (INV051)
- VAT total amount (INV049)
- Invoice line net amount (INV065)
- Sum of line amounts (INV054)
- Sum of Allowance on document level (INV057)
- Sum of Charges on document level (INV058)
- Invoice total without VAT (INV055)
- Rounding of invoice total (INV060)
- Invoice total with VAT (value of purchase) (INV056)
- Paid amounts (INV059)
- Amount due for payment (INV061)
- Invoice line item net price (INV075)
- Invoice line item price discount (INV076)
- Invoice line item gross price (INV077)

In addition to stating the VAT total amount in the invoice currency the VAT MAY be stated in the local currency (INV093), if different. The VAT total amount in local currency (INV093), IS NOT part of the calculation of the invoice totals and MUST NOT to be used in validations (rules 1 through 4).

4.7 Negative amounts (rule 7)

Rule 7

Amounts in invoices may be negative with the exception that Amount due for payment must not be negative when payment means is bank transfer. Net price should not be negative and negative invoice lines should be created by using negative quantity.

Validation statement

- IF Payment means type (INV040) represents bank transfers (codes 31 or 42) THEN Amount due for Payment (INV061) MUST NOT be less than zero (0.00)

4.8 Price calculation (rule 8)

Rule 8

The net price of an item SHOULD be equal to the gross price less the discounted amount.

Validation statements

- Net price (INV075) SHOULD equal gross price (INV077) less price discount (INV076) amount.

4.9 Decimals (rule 9)

Rule 9

Currency amounts are stated with maximum 2 decimals rounded as necessary.

VAT rates are stated as percentages with maximum 2 decimals. E.g. twenty one and one third percent is stated as 21.33

Quantity is stated with maximum 3 decimals.

Unit prices are stated with maximum of 4 decimals.

4.10 Payment means (rule 10)

Rule 10

When payment means stated in a Core Invoice are, international bank transfers identified with Payment means type as code "31" it indicates that sellers account information should be according SEPA specifications, i.e. account should be identified by using IBAN account id and the financial institution identified by using BIC code.

In accordance with general requirements by financial institutions, an invoice should never include a full card number but only the last 4 to 6 digits.

Validation statements

- If Payment means type (INV040) is "31" then schema for Account identifier (INV043) SHOULD be IBAN AND schema Financial Institution identifier (INV045) SHOULD be BIC.
- If Payment means type (INV040) is Bank card "48" then MAXIMUM length for Account identifier (INV043) is 6 digits.

4.11 Attachments (rule 11)

Rule 11 - This rule is based on BII2 workshop document on Technical guideline for Attachments.

- Attachments should be Base64 encoded.
- Seller can only expect buyers to process the following MIME types:
 - Pdf – application / pdf
 - TXT – text / plain

- GIF – image / gif
 - TIFF – image / tiff
- Seller can not assume that buyer will receive attachments larger than 5Mb