Specification

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PEPPOL Post Award eProcurement
ICT - Models

BIS 4a – Basic Invoice Only

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Editors:
>   Bergthor Skulason (NITA)
>   Klaus V. Pedersen (DIFI)

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Contributors

Organisations

DIFI (Direktoratet for forvaltning og IKT)[1], Norway, http://www.difi.no
NITA (IT- og Telestyrelsen)[2], Denmark, http://www.itst.dk
PEPPOL.AT/BRZ (Bundesrechenzentrum)[3], Austria, http://www.brz.gv.at/
ESV (Ekonomistyrningsverket)[4], Sweden, http://www.esv.se

Persons

Bergthor Skulason, NITA (editor)
Bao Dinh Nguyen (DIFI)
Georg Birgisson, NITA/Eykur
Oriol Bausá, NITA/Invinet
Klaus V. Pedersen, DIFI
Martin Forsberg, (ESV/SFTI)
Peter Borresen, NITA/ebConnect
Philip Helger, PEPPOL.AT/BRZ
Tim McGrath, DIFI/Document Engineering Services

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[1] English: Agency for Public Management and eGovernment
[2] English: National IT- and Telecom Agency
[3] English: Austrian Federal Computing Centre
[4] English: The Swedish National Financial Management Authority

Table of Contents

1 Introduction

This BIS is a result of work within PEPPOL project and is published as part of PEPPOL specifications.

This PEPPOL BIS provides a set of specifications for implementing a PEPPOL business process. The document is concerned with clarifying requirements for ensuring interoperability of pan-European Public eProcurement and provides guidelines for supporting these requirements and how to implement them.

1.1 Audience

The audience for this document is organizations wishing to be PEPPOL enabled for exchanging electronic invoices, and/or their ICT-suppliers. These organizations may be:
- Service providers
- Contracting Authorities
- Economic Operators
- Software Developers

More specifically it is addressed towards the following roles:
- ICT Architects
- ICT Developers
- Business Experts

1.2 The PEPPOL BIS – short overview

The PEPPOL BIS (**B**usiness **I**nteroperability **S**pecification) provides a set of specifications for implementing PEPPOL business documents. The specifications enable any company to issue electronic documents that fulfil legal and business processing requirement within the European Union and the EEA[5]. It supports a subset of information that is used by most industries and enables users to issue documents (invoices, orders, etc...) that are valid for cross border trade within the European Union and the EEA.

The BIS specifications are based on set of requirements to provide support for "common business processes" and legal requirements. The BIS identifies a small set of information elements and business rules as a basis for supporting these requirements. A selection of business rules place restrictions on the data elements to fulfil the requirements and clarify choices otherwise left open to implementers.

The PEPPOL BIS does not support data that is specific to certain industries or may be required in other areas. Trading partners can bi-laterally or within a trading context, provide additional content and rules to meet their specific needs by using this BIS as basis.

The PEPPOL BIS can serve as a standardised communication agreement within a trading community and can be reused for new trading partners without any additional setup cost. Implementing PEPPOL therefore opens the ability to exchange documents with various trading partners without previous bi-lateral setup and thereby lowering the cost of connecting to each new trading partner.

PEPPOL approach is to promote the PEPPOL BIS as a procurement community agreement. One of the defining components of PEPPOL is the service registries (SMP) where trading partners register their capabilities to receive electronic documents according to specific BIS. This registration constitutes a community agreement: any PEPPOL partner can lookup these capabilities and engage in document exchange with the registered company without previous agreement or bi-lateral setup.

A PEPPOL BIS can be seen as part of a standardised communication agreement that deals with:
- sequence of document in scope
- content of documents (data elements)
- business rules that govern the exchange

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[5] EEA is the European Economic Area. Current members are Iceland, Liechtenstein and Norway.

PEPPOL specifications for the post award provide support for the procurement processes linking information flow from catalogues, through ordering into billing, see [PEPPOL_PostAward] for more information.

1.3   PEPPOL BIS 4a - Basic Invoice Only – scope

This PEPPOL BIS supports a process for suppliers to send an invoice. It is intended to support transmission of an electronic invoice for processing in semi automated processes by the receiver. The BIS mandates no procurement related data but supports different ways of referring to the ordering process. By selective use of such references it can be used as basis for automated processing of invoices.

The intended scope for this BIS is:
▶ B2B and B2G
▶ Common business processes for cross industry and cross border invoicing
▶ To enable both VAT and non VAT invoicing
▶ Regional invoicing within EU and EEA
▶ Mainly for purchase of goods and services and/or services that can be itemized.

This PEPPOL BIS supports a set of "common use cases / process". These are processes that are used widely or understood as being relevant for most companies. The main processes supported by this BIS are:
▶ Accounting
▶ Approval
▶ Payment
▶ VAT reporting
▶ Auditing

This PEPPOL BIS supports requirements by providing elements for information needed to meet the requirement. This BIS also provides a set of business rules to clarify content and implementers can use them as basis for validation where it provides business value.

1.4   PEPPOL BIS 4a - Basic Invoice Only – benefits

In the area of invoicing, many procurement agencies are using customized implementation for each trading partner. This approach leads to a situation that addresses only the (few) trade relationships with large volume of document but leaves out the (many) small ones. By implementing receiving capabilities of BIS 4a the procurement agency can reuse the investment for various trading partners, enabling them to engage smaller contract situations. Other potential benefits of using this BIS are, among others:
▶ Can be mandated as a basis for national or regional eInvoicing initiatives.
▶ Can be used by procuring agencies as basis for moving all invoices into electronic form. The flexibility of the specifications allows the buyers to gradually automate processing of invoices based on different sets of identifiers or references, based on cost benefit approach.
▶ SME can offer their trading partners the option of exchanging standardized documents in a uniform way and thereby move all invoices into electronic form.
▶ Large companies can implement this BIS as standardized documents for general operations and implement custom designed bi-lateral connections for large trading partners.
▶ Can be used as basis for restructuring of in-house processes of invoices.
▶ Significant saving can be realized by the procuring agency by automating and streamlining in-house processing. The accounting can be automated significantly, approval processes simplified and streamlined, payment scheduled timely and auditing automated.

This PEPPOL BIS is based on the CEN/ISSS WS/BII Profile BII04 specification, see [BII_Invoice].

1.5   PEPPOL BIS 4a - Basic Invoice Only – summary

This PEPPOL BIS structure is based on the European Interoperability Framework 2.0. PEPPOL BIS applies the Framework within 5 layers as follows:
▶ Legal:
 ▶▶ Enable both VAT and non VAT invoicing

▸▸ The external environment is governed by the legal regime on invoicing. Legal scope is the EU VAT Directive 2006/112/EC on the common system of value added tax (VAT) for supporting sales and purchase invoices.

▸▸ PEPPOL provides methodology for supporting additional national legal requirements to the EU VAT Directive and applies therefore equally well to domestic trade as cross border.

▸ Organization (Organization/Business):
  ▸▸ This PEPPOL BIS supports B2B and B2G
  ▸▸ This PEPPOL BIS supports cross border, regional and domestic invoicing in EU and EEA
  ▸▸ This PEPPOL BIS can function as a standardized EDI agreement within a trading community
  ▸▸ This PEPPOL BIS supports linking of business processes within the sending and receiving organization. This process of invoice transmission in electronic form can be linked into internal processes of both sender and receiver, which may differ for various reasons.

▸ Organization (Process):
  ▸▸ This PEPPOL BIS supports a set of "common business processes" that are assumed to be supported by most. These are processes that are used widely or understood as being relevant for most companies.

▸ Semantic:
  ▸▸ A minimum set of information elements required to fulfil legal requirements for an invoice.
  ▸▸ The set of information elements is assumed to be sufficient to support Organizational business and processing requirements stated above.
  ▸▸ A CORE invoice:
     • Data model, a set of elements that the receiver MUST be able to process.
     • Business rules, a set of business rules that ensure a common way of processing the information elements. The rules are stated in a way that allows for automated validation of document instances. Issuer of invoices cannot issue documents that conflict with these rules.

     PEPPOL adds business rules on top of the data model to clarify certain design choices left open by the CEN BII. These choices are intended to lower the implementation threshold by limiting options for implementers and thereby increase interoperability of PEPPOL invoices.

▸ Technical Interaction (Process and semantic implementation):
  ▸▸ Binding to OASIS UBL 2.0, see [UBL]
  ▸▸ ISO/IEC 19757-3 Schematron, for automation of document validation, see [Schematron]
  ▸▸ XSLT Stylesheet for presentation of content, see [XSLT]

▸ Technical Interaction (eSignature Validation):
  ▸▸ Not mandatory in this PEPPOL BIS. Not supported.

▸ Technical Transport: Based on BusDox 1.0, see [PEPPOL_Transp].
  ▸▸ PEPPOL Transport Infrastructure
  ▸▸ PEPPOL requires all documents to be transported using the PEPPOL Transport Infrastructure.

1.6 PEPPOL Interoperability, conformance and testing support

Participants within the PEPPOL community must claim conformance to be able to register capabilities and participate in document exchange. Conformance is therefore expressed as requirements on the software solution implementing the BIS.

More information on testing support can be found at [PEPPOL_PostAward].

1.7   PEPPOL Implementation support

This PEPPOL BIS is bound to UBL 2.0 syntax. PEPPOL provides a set of tools as implementation support. These include:

- Specifications of PEPPOL BIS 4a – Basic Invoice Only (this document).
- Implementation guideline for this BIS.
- Business rules and code lists.
- Schematron components for validation of business rules that apply to documents.
- Stylesheet for presentation of Core data elements.
- A HTML presentation of the CEN BII data model for browsing.
- Validation web site
- Example invoice documents and test cases

Information on implementation support can be found at PEPPOL Post Award support page, see [PEPPOL_PostAward].

PEPPOL has set up the PEPPOL Enterprise Interoperability Architecture (EIA) – that presents the PEPPOL artefacts in a repository. The EIA repository is a three dimensional matrix for organizing results of the project that you can navigate by clicking on the cells in the framework. For more information about the PEPPOL EIA, see [PEPPOL_EIA].

The latest version of this document can be found in: Post Award eProcurement / ICT Architecture / Models.

1.8   References

[PEPPOL]	http://www.peppol.eu/
[PEPPOL_EIA]	http://www.peppol.eu/peppol_components/peppol-eia/eia
[PEPPOL_PostAward]	http://www.peppol.eu/peppol_components/peppol-eia/eia#ict-architecture/post-award-eprocurement/models
[PEPPOL_Transp]	http://www.peppol.eu/peppol_components/peppol-eia/eia#ict-architecture/transport-infrastructure/models
[CEN_BII]	www.cen.eu/cwa/bii/specs
[CEN_BII2]	http://www.cenbii.eu
[BII_Invoice]	http://www.cen.eu/cwa/bii/specs/Profiles/ProfileDoc/BII profile 04 - Invoice only v1.pdf
[BII_InvoiceModel]	An browsable HTML version: http://www.cen.eu/cwa/bii/specs/Profiles/Data/html/CoreTrnsDm/BiiCoreTrdm010 Invoice; 1.0; CENBII/D1.htm and MS-Excel version: http://www.cen.eu/cwa/bii/specs/Profiles/Data/TrnsDm/CoreTrnsDm/BiiCoreTrdm010 Invoice; 1.0; CENBII.xls
[UBL]	http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.html
[UBL_Invoice]	http://docs.oasis-open.org/ubl/cs-UBL-2.0/xsd/maindoc/UBL-Invoice-2.0.xsd
[Schematron]	http://www.schematron.com
[XSLT]	http://www.w3.org/TR/xslt20/
[DIR_2006/112/EC]	Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax, found at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0112:EN:NOT
[DIR_1999/93/EC]	Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures, found at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0093:EN:NOT
[EIF]	European Interoperability Framework 2.0, found at: http://ec.europa.eu/isa/library/index_en.htm http://ec.europa.eu/isa/documents/isa_annex_ii_eif_en.pdf

2   Legal Interoperability Requirements

This chapter describes the legal scope for adoption of PEPPOL Business Interoperability Specifications (BIS) 4a – Basic Invoice Only. These requirements apply to Contracting Authorities (Customers) and Economic Operators (Suppliers) who reside in countries whose eProcurement legal frameworks are aligned with requirements as stated in this specification.

This BIS provides support for calculation and reporting of VAT according to the relevant EU Directive and should provide necessary elements for national legal VAT requirements that apply for invoices issued to national and foreign buyers:

▶ Directive 2006/112/EC of 28 November 2006 on the common system of value added tax (hereafter referred to as 'Directive 2006/112/EC') is the main body of EU level legislation on eInvoicing. The Invoicing Directive 2001/115/EC, was incorporated into the VAT Directive (2006/112/EC) as from 1 January 2007, see [DIR_2006/112/EC].[6]

▶ This BIS aims to provide for information that is legally mandatory for invoicing in the EU member states. National requirements from one country cannot impose upon another country.

2.1   Requirement for a legal invoice

Directive 2006/112/EC, Article 220 establishes the Invoice as a legal document. It states that:

Requirement Leg01 - Legal invoice

Every taxable person shall ensure that, in respect of the following, an invoice is issued, either by himself or by his customer or, in his name and on his behalf, by a third party.

PEPPOL position

The issuer of an invoice is responsible for producing a legal invoice. This includes:
1. Requirements stated in this BIS.
2. Additional legal requirements can apply in the country of origin.
3. Additional content or business rules applied to an invoice may not conflict with legal requirements.

2.2   VAT requirements to eInvoicing

According to Directive 2006/112/EC, an invoice has a dual function for VAT purposes as far as the Tax authorities are concerned.
1. The invoice should ensure that, if the transaction is liable to VAT, the supplier charges the right amount.
2. (With a view to ensuring the due and proper collection of VAT) an invoice is one of the key elements for tax audits, in which correct application of the VAT provisions is verified.[7]

Requirement Leg02 - VAT compliance

The issuer of an invoice (normally the Economic Operator as supplier of goods and services) is responsible for charging the right amount of VAT and ensuring correct application of the VAT provisions.

PEPPOL position

The process for reclaiming of VAT is out of scope for this BIS.

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[6] See European Commission study: Analysis of Business Requirements for e-Invoicing in a Public Procurement Context. 2009.
[7] Global (E-)Invoicing & (E-)Archiving, PWC. Page 46

2.3 Content Requirements for eInvoicing

Directive 2006/112/EC, Article 226 states the following details are required in an invoice:

Requirement Leg03 Content of an invoice

1. The date of issue
2. A sequential number, based on one or more series, which uniquely identifies the invoice
3. The VAT identification number referred to in Article 214 under which the taxable person supplied the goods or services
4. The customer's VAT identification number, as referred to in Article 214, under which the customer received a supply of goods or services in respect of which he is liable for payment of VAT, or received a supply of goods as referred to in Article 138;
5. The full name and address of the taxable person and of the customer
6. The quantity and nature of the goods supplied or the extent and nature of the services rendered;
7. The date on which the supply of goods or services was made or completed or the date on which the payment on account referred to in points (4) and (5) of Article 220 was made, in so far as that date can be determined and differs from the date of issue o the invoice;
8. 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;
9. The VAT rate applied
10. The VAT amount payable, except where a special arrangement is applied under which, in accordance with this Directive, such a detail is excluded;
11. In the case of an exemption or where the customer is liable for payment of VAT, reference to the applicable provision of this Directive, or to the corresponding national provision, or any other reference indicating that the supply of goods or services is exempt or subject to the reverse charge procedure
12. In the case of the supply of a new means of transport made in accordance with the conditions specified in Article 138(1) and (2)(a), the characteristics as identified in point (b) of Article 2(2);
13. Where the margin scheme for travel agents is applied, reference to Article 306, or to the corresponding national provisions, or any other reference indicating that the margin scheme has been applied;
14. Where one of the special arrangements applicable to second-hand goods, works of art, collectors' items and antiques is applied, reference to Articles 313, 326 or 333, or to the corresponding national provisions, or any other reference indicating that one of those arrangements has been applied;
15. Where the person liable for payment of VAT is a tax representative for the purposes of Article 204, the VAT identification number, referred to in Article 214, of that tax representative, together with his full name and address.

PEPPOL position

These requirements are satisfied by the CEN ISSS WS/BII BII04 Core Invoice. The formal expression of these requirements is given in chapter 6, Semantic Interoperability Layer.

2.4 Currencies in invoices

Directive 2006/112/EC, Article 230 states the following requirements on use of currencies:

Requirement Leg04 Currencies in invoices

The amounts which appear on the invoice may be expressed in any currency, provided that the amount of VAT payable is expressed in the national currency of the Member State, in which the supply of goods or services takes place, using the conversion mechanism laid down in Article 91.

PEPPOL position

In PEPPOL invoices the use of currencies is restricted to single currency stated on header level. The amount of VAT payable should be stated in the national currency. See chapter 6, Semantic Interoperability Layer.

2.5   Acceptance of electronic invoices

Directive 2006/112/EC, article 232 states for the receiver:

Requirement Leg05   Acceptance of electronic invoices

Invoices issued pursuant to Section 2 may be sent on paper or, subject to acceptance by the recipient, they may be sent or made available by electronic means.

PEPPOL position

All parties (Contracting Authorities) capable of receiving eInvoices through PEPPOL must register their capability in a PEPPOL certified Service Metadata Publisher (SMP). A registration of receiving capabilities constitutes an acceptance by the Contracting Authority to receive invoices by electronic means.

2.6   Requirements to store records

To enable tax authorities to inspect documents for their correct application of the VAT legislation, PEPPOL participants are responsible for storing eInvoices. Rules related to: the form of storage, place of storage and time frame can vary from country to country.
Directive 2006/112/EC, article 244 states that:

Requirement Leg06   Storage of invoices

Every taxable person shall ensure that copies of the invoices issued by himself, or by his customer or, in his name and on his behalf, by a third party, and all the invoices which he has received, are stored.

PEPPOL position

PEPPOL participants must store eInvoices in accordance with legislation and rules prescribed by National legislation. Processes for storage of eInvoices are out of scope for PEPPOL.

2.7   eInvoice requirements

Directive 2006/112/EC, article 233 states that:

Requirement Leg07   electronic invoice transport

Invoices sent or made available by electronic means shall be accepted by Member States provided that the authenticity of the origin and the integrity of their content are guaranteed by one of the following methods:
▶▶ by means of an advanced electronic signature […]
▶▶ by means of electronic data interchange (EDI), as defined in Article 2 of Commission Recommendation 1994/820/EC of 19 October 1994 relating to the legal aspects of electronic data interchange (2), if the agreement relating to the exchange provides for the use of procedures guaranteeing the authenticity of the origin and integrity of the data.
▶▶ Invoices may, however, be sent or made available by other electronic means, subject to acceptance by the Member States concerned.

PEPPOL position

It is required that electronic invoice documents are communicated in a secure and reliable which is ensured by using the PEPPOL Transport Infrastructure (BusDox).

Commission Recommendation 1994/820/EC of 19 October 1994, article 2:

Requirement Leg08   electronic invoice transport

Electronic Data Interchange (EDI) is defined in as:
▶▶ **electronic transfer from computer to computer:** There must be a transfer of electronic data between computers. Potentially, especially in the case of intercompany invoicing within one ERP system, it should be verified whether the exchange between different systems can qualify. Although a lot in practice, the Recommendation does not require use of virtual private networks (VPNs). In other words, one can opt to transfer the data over the Internet.
▶▶ **of commercial and administrative data:** It is clear that commercial and administrative data can be found in an invoice message.

▸▸ **using an agreed standard for structuring the EDI message:** the use of the term "agreed standard" includes, but is not limited to, the use of UN/EDIFACT standards and may be applied to such other standards as the parties may agree on. Therefore, it is obvious that XML standards and ERP standards such as the SAP iDoc, also fall within the requirement. The European commission has also confirmed this position at various junctures.

PEPPOL position

PEPPOL BIS 4a for the invoice document ensures an agreed standard for structuring EDI messages (in XML syntax) using UBL 2.0.

2.8   Digital signature requirements

According to Article 229 Member States shall not require invoices to be signed. However some countries interpret the requirements for "*authenticity of the origin and the integrity of their content*" (Leg08 - electronic invoice transport) by enforcing advanced digital signatures on electronic invoices.

In particular, Hungary and Italy have some overarching regulations about the signature of electronic documents. Italian legislation, for example, provides that the transmission of electronically signed documents by using electronic means of communication has the same evidential value of the paper communication sent by certified mail.

Use of electronic signatures is governed by Directive 1999/93/EC on a Community framework for electronic signatures, see [DIR_1999/93/EC].

Requirement Leg09   Use of digital signature

Some member countries enforce usage of advanced electronic signatures in domestic trade.

PEPPOL position

A digital signature is not mandatory for eInvoices exchanged using PEPPOL BIS 4a.

3 Organizational - Organization/Business Interoperability

Organizational/Business requirements for invoices originate from the business context and the goods and services in scope for the procurement. These requirements reflect on the end-to-end communication between customer and supplier and enable linking of in-house processes between them. The business objective of electronic invoicing is to achieve interoperation between the in-house business processes of the sending and receiving organization.

3.1 Peppol as CEN BII extension

The Peppol project, has adopted the BII profile specification as basis for invoicing for public procurement in Europe. For implementing the BII profiles PEPPOL has identified number of issues.

- In some cases the BII profiles provide options for entering data, e.g. in the case of addresses that can be entered either by providing address details or by using identifiers. PEPPOL makes a choice from those options to improve interoperability.
- The BII orientation towards compliance to the EU directive on VAT is different from the PEPPOL orientation. Whereas BII provides the necessary elements in the core profile specifications for complying to the EU directives on VAT, PEPPOL seeks to define rules that enforce compliance.
- BII is designed for cross border trade. For implementation it is however realized that all invoices are issued within the legal domain of a country and consequently need to comply with the legal requirements imposed on the supplier.
- It is the end goal of the project to promote wide spread adoption of electronic invoices by suppliers who supply governments in different countries. It is assumed that only those who already have considerable trade with the public sector across borders would adopt invoicing solutions that only work for cross border trade and then use another solution for their domestic trade. Considering that most companies do most of their business domestically it is considered important that the solutions can be implemented as a single solution for domestic as well as cross border trade with different countries.

To address the above issues PEPPOL has made use of the extension functionality that is part of the BII profiles. The role of this extension is to enforce those choices.

3.2 Organizational scope

In this BIS:

- a service provider acting on behalf of buyer / seller can issue / receive the invoice.
- any mapping done to / from in-house or internal network formats by either party or service providers on their behalf is out of scope for PEPPOL and is the responsibility of the relevant trading partner.
- the customer must be registered in a PEPPOL recognized SMP for receiving invoice documents.
- This BIS provides support for semi automated processing of invoices by the receiver and can be used as basis for automated processing of invoices.

3.3 Business requirements

The CEN BII workshop specifies a core invoice document that is intended to meet legal requirements in all countries of Europe for invoices originating abroad, as well as supporting most common business needs. In some cases the BII document does this by providing options. The PEPPOL project has identified some issues where it is beneficial to select from those and state as part of this PEPPOL BIS.

The business requirements identified are the following:

Org01 In all countries participating in PEPPOL there are legal requirements that invoices should include address information for the customer/buyer and the supplier/seller and their names. In some countries this information can be given either by using identifiers that refer to a registry that holds the name and detailed address or by providing the name and address details directly in the invoice. In other country however only the latter approach, giving the name and address details in the invoice, is accepted. This means that if cross border invoices in PEPPOL always include the party name and its address details then they should comply with the law in all participating country. Consequently all invoices should at minimum contain the customer and suppliers name and address detail as
- street name and building number
- city name

⏵⏵ zip code
⏵⏵ country code

Org02   In the BII core invoice it is not possible to give VAT tax categorization for allowances and charges on document level. These amounts may carry VAT so the categorization must be given.

Org03   For payment means in cross border trade it is recommended that parties use the SEPA payment system which uses the IBAN and the BIC codes for identification. To increase consistency PEPPOL sets the rule that IF the IBAN is used THEN BIC SHOULD also be used.

Org04   In order to align with the structure of most ERP systems and to comply with legal requirements of some participating countries it is required to provide the quantity for each line.

Org05   Some code list and identifier elements in the BII core invoice do not specify what code list or identifier schema should be used which implies that the sender can use any or has to agree with the receiver which one should be used. Limiting the choice of code lists and identifier a schema reduces the set that need to be considers and improves interoperability.
⏵⏵ The choice of party, postal address and location identifiers needs to be limited to a stated list which currently includes: GLN
⏵⏵ The choice of standard item identifiers needs to be limited to a stated list which currently includes: GTIN
⏵⏵ The choice of commodity classification code lists needs to be limited to a stated list which currently includes: UN/SPSC, CPV, eClass
⏵⏵ The choice of financial institution identification identifiers needs to be limited to a stated list which currently includes: BIC
⏵⏵ When giving VAT tax exemption reason it should be given as code using the CWA 15577 tax exemption code list. Version 2006.

Org06   The BII normative documentation defines specific codes or code lists but those are not expressed in the BII validation artefacts. In order to enforce correct implementation these need to be expressed in the PEPPOL validation artefacts. .
⏵⏵ For the embedded document binary object the Mime code in attribute should be MIMEMediaType.

Org07   For deciding when different rules apply the definition of cross border and domestic is as follows:
⏵⏵ The nationality of a party is determined by his legal registration country. If that is not provided in an invoice it is assumed to be the same as the postal address. Nationality is the country to which the party is liable for tax. An invoice is considered to be cross border if the nationality of the customer and the supplier is not the same, else it is considered to be domestic.

Org08   For improving conformance to the EU VAT directive 2006/112 the PEPPOL implementation applies additional rules that "enforce" compliance in cases where BII specification only "provide" for compliance by including necessary elements as optional. Both for regular VAT and reverse charge VAT.

Org09   For the purpose of aligning implementations the amounts of allowance and charges as well as related multipliers are forced to be non-negative, i.e. a negative allowance must be treated as charge and vice versa. For completeness in calculation base amount and multiplier must both be given if used.

Org10   For the purpose of aligning implementations the payable amount is forced to be a non-negative and periods MUST contain either start or an end date.

Org11   The creditor is also the issuer of the invoice, meaning that no self billing or factoring is involved.

Org12   Following policies apply to use of decimals and rounding in all PEPPOL documents:
⏵⏵ 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 of a percent is stated as 21.33
> ▶▶ Quantity is stated with maximum 3 decimals.
> ▶▶ Unit prices are stated with maximum of 4 decimals.

Org13   A core invoice must support reverse charge invoices which are those were 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.

3.4   PEPPOL Policy for using Identifiers

PEPPOL project has defined a "Policy for Using Identifiers" [PEPPOL_Transp] that specifies how to use identifiers in both its transport infrastructure and within the documents exchanged across that infrastructure. It also introduces principles for any identifiers used in the PEPPOL environment. The policies that apply to this BIS are the following:

Org21   Policy 8. - XML attributes for Party Identifiers in UBL documents
The "schemeID" attribute must be populated in all instances of the "ID" element when used within a "PartyIdentification" container and in all instances of the "EndpointID" element when used within a "Party" container.

Org22   Policy 11 - PEPPOL Customization Identifiers.
The PEPPOL Customization Identifier identifies the standardised transaction (e.g. BII transaction) and any PEPPOL extension, as it applies to the transaction. The full syntax is:
        <transactionId>:# <extensionId>[#<extensionId>]

Org23   Policy 12 - Specifying Customization Identifiers in UBL documents
The value for CustomizationID element in the document instance MUST correspond to the Customization ID of the BusDox Document Identifier (see POLICY 11). In addition, the "schemeID" attribute must specify 'PEPPOL' to indicate this convention is a PEPPOL policy.

Org24   Policy 16 - PEPPOL Process Identifiers
PEPPOL processes are identified by the respective BII processes. The process identifier has to match the BII profile ID.

4 Organizational - Process Interoperability

The PEPPOL project, has adopted the BII profile specifications as basis for public procurement in Europe. This PEPPOL BIS reuses the collaboration specifications as a means of controlling the interaction between the trading parties.

4.1 CEN ISSS WS/BII Profile

Invoices need to be exchanged between the Economic Operator and the Contracting Authority in a specified process that is understood, agreed and supported by both parties. The CEN ISSS WS/BII architecture design is intended to support object-oriented implementations. This is achieved by grouping messages into objects that can be arranged differently in various profiles. These objects are called collaborations and they may contain one or more message transactions. These objects can be reused in different profiles. The Invoice Only process is defined by the CEN ISSS WS/BII profile BII04, see [BII_Invoice].

The BiiColl004 collaboration contains the following transaction flow.
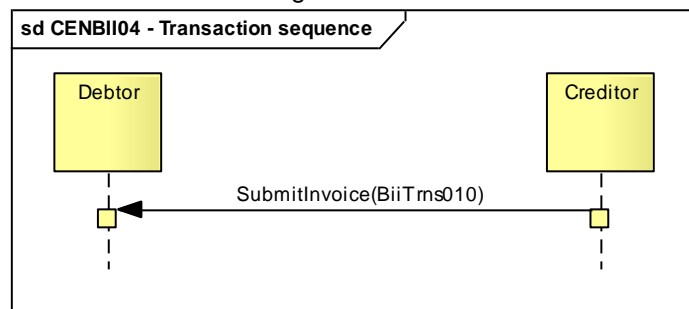
4.2 Business rules

The BII profile business rules are listed in chapter 5.3 - *BIS 4a – Basic Invoice Only, Business Rules*. The BII profile specifications do not allow modifications to the collaboration process defined. Consequently PEPPOL does not specify any additional rules that apply to the process.

5 Semantic Interoperability

The PEPPOL BIS data model is based on the CEN/ISSS WS/BII BiiCoreTrdm specifications [CEN_BII]. They define transaction data models for the information content of a business transaction exchanged within the scope of a BIS. In CEN BII BII04 the transaction data model used is BiiCoreTrdm010, see [BII_InvoiceModel].

A PEPPOL extension is identified as: eugen.

5.1 Legal requirements, mapping to semantic model

The table below shows how the legal requirements from chapter 2 are supported by this BIS.

Req. Leg03 Content	Data elements	Business rules	Example (Ch No.)
Par. 1	Provided as Invoice date	BIIRULE-T10-R023	6.3
Par. 2	Provided as Invoice ID	BIIRULE-T10-R024	6.2
Par. 3	Provided as Sellers VAT ID	BIIRULE-T10-R009	6.4
Par. 4	Provided as Buyers VAT ID	EUGEN-T10-R007	6.5
Par. 5	Provided as Sellers and Buyers Name and Address	BIIRULE-T10-R026 BIIRULE-T10-R027	6.4 6.5
Par. 6	Provided with Quantity, UOM, Item Name and References.	BIIRULE-T10-R025 EUGEN-T10-R003	6.15 6.16
Par. 7	Provided as Delivery Date		6.6
Par. 8	Provided in VAT breakdown section as Tax Total and detail information on Tax categories.	EUGEN-T10-006 BIIRULE-T10-R028 BII-T10-010	6.13
Par. 9	Rate applied is provided in the Tax Subtotal and shown in the VAT breakdown section.	EUGEN-T10-R008 BII-T10-009	6.13
Par. 10	Total VAT is shown in the summary and VAT for each category in the VAT breakdown section.	BIIRULE-T10-R047	6.13
Par. 11	Supported in Tax Exemption Reason Code in Tax Total class information.	EUGEN-T10-R009	6.13
Par. 12	A specialized requirement that is not considered to apply to the common core Invoice.	#N/A	
Par. 13	A specialized requirement that is not considered to apply to the common core Invoice.	#N/A	
Par. 14	A specialized requirement that is not considered to apply to the common core Invoice.	#N/A	
Par. 15	A specialized requirement that is not considered to apply to the common core Invoice.	#N/A	
Req. Leg04 Currencies	A single Currency for the Invoice is set and can be any currency.	BIIRULE-T10-R034	6.2

Table 1 Legal Requirements and Core Invoice Information

5.2 BIS 4a – Invoice Transaction Data Model

The BIS 4a data model is based on TRDM010 invoice transaction from CEN BII. Information about this data model can also be viewed on the CEN BII web site, see [CEN_BII]. Please note that changes that PEPPOL has done to the data model are not represented in the BII web site.
   ▸ In MS-Excel table format.
   ▸ In HTML browsable format,
See [BII_InvoiceModel].for further information.

The following tables show the elements in a Core invoice.

- ▶ First two columns show the Cardinality of the element.
- ▶ The element name (element preceded with a "+" sign is a class, the rest are simple elements).
- ▶ The last column states restrictions, references, business rules or code list that may apply to the field.
- ▶ Please note that the order of elements when used in invoices must follow the order stated in the below list. For more information please refer to [UBL].

5.2.1 BIS 4a – The Invoice header

The following table shows the content of the core invoice header:

Cardinality		Element name	Restriction
1	1	Invoice/UBL Version Identifier/Identifier	BIIRULE-T10-R029
1	1	Invoice/Customization Identifier/Identifier	Org23 BIIRULE-T10-R030
1	1	Invoice/Profile Identifier/Identifier	Org24 BIIRULE-T10-R031 BIIPROFILE-T10-R001
1	1	Invoice/Identifier	BIIRULE-T10-R024
1	1	Invoice/Issue Date/Date	BIIRULE-T10-R023
1	1	Invoice/Invoice Type Code/Code	CL-010-001
0	1	Invoice/Note/Text	
0	1	Invoice/Tax Point Date/Date	
1	1	Invoice/Document Currency Code/Code	CL-010-002 BIIRULE-T10-R034 BIIRULE-T10-R035
0	1	Invoice/Accounting Cost/Text	
0	1	+Invoice/Invoice Period/Period	BIIRULE-T10-R001 EUGEN-T10-R020 EUGEN-T10-R021
0	1	… Period/Start Date/Date	
0	1	… Period/End Date/Date	
0	1	+Invoice/Order Reference	BIIPROFILE-T10-R002
1	1	… Order Reference/Identifier	BIIRULE-T10-R035
0	1	+Invoice/Contract Document Reference/Document Reference	
1	1	… Document Reference/Identifier	BIIRULE-T10-R036
0	1	… Document Reference/Document Type/Text	
0	n	+Invoice/Additional Document Reference/Document Reference	
1	1	… Document Reference/Identifier	BIIRULE-T10-R037
0	1	… Document Reference/Document Type/Text	
0	1	… +Document Reference/Attachment	
0	1	… … Attachment/Embedded Document/Binary Object	PCL-010-001
0	1	… … +Attachment/External Reference	
1	1	… … … External Reference/URI/Identifier	
1	1	+Invoice/Accounting Supplier Party/Supplier Party	
1	1	… +Supplier Party/Party	
0	1	… … Party/Endpoint Identifier/Identifier	PCL-010-009
0	1	… … +Party/Party Identification	
1	1	… … … Party Identification/Identifier	PCL-010-008
1	1	… … +Party/Party Name	
1	1	… … … Party Name/Name	BIIRULE-T10-R026
1	1	… … +Party/Postal Address/Address	EUGEN-T10-R001
0	1	… … … Address/Identifier	PCL-010-003
0	1	… … … Address/Postbox/Text	

Cardinality						Element name	Restriction
1	1	…	…	…		Address/Street Name/Name	
0	1	…	…	…		Address/Additional Street Name/Name	
0	1	…	…	…		Address/Building Number/Text	
0	1	…	…	…		Address/Department/Text	
1	1	…	…	…		Address/City Name/Name	
1	1	…	…	…		Address/Postal Zone/Text	
0	1	…	…	…		Address/Country Subentity/Text	
0	1	…	…	…		+Address/Country	
1	1	…	…	…	..	Country/Identification Code/Code	CL-010-004 BIIRULE-T10-R040
0	1	…	…			+Party/Party Tax Scheme	
0	1	…	…	…		Party Tax Scheme/Company Identifier/Identifier	EUGEN-T10-R007 BIIRULE-T10-R003
1	1	…	…	…		+Party Tax Scheme/Tax Scheme	
1	1	…	…	…	..	Tax Scheme/Identifier	CL-010-005
0	1	…	…			+Party/Party Legal Entity	
0	1	…	…	…		Party Legal Entity/Registration Name/Name	
1	1	…	…	…		Party Legal Entity/Company Identifier/Identifier	BIIRULE-T10-R041
0	1	…	…	…		+Party Legal Entity/Registration Address/Address	
0	1	…	…	…	..	Address/City Name/Name	EUGEN-T10-R001
0	1	…	…	…	..	Address/Country Subentity/Text	
0	1	…	…	…	..	+Address/Country	
1	1	…	…	…	.. …	Country/Identification Code/Code	CL-010-004 BIIRULE-T10-R040
0	1	…	…			+Party/Contact	
0	1	…	…	…		Contact/Telephone/Text	
0	1	…	…	…		Contact/Telefax/Text	
0	1	…	…	…		Contact/Electronic Mail/Text	
0	1	…	…			+Party/Person	
0	1	…	…	…		Person/First Name/Name	
0	1	…	…	…		Person/Family Name/Name	
0	1	…	…	…		Person/Middle Name/Name	
0	1	…	…	…		Person/Job Title/Text	
1	1					+Invoice/Accounting Customer Party/Customer Party	
1	1	…				+Customer Party/Party	
0	1	…	…			Party/Endpoint Identifier/Identifier	PCL-010-009
0	1	…	…			+Party/Party Identification	
1	1	…	…	…		Party Identification/Identifier	PCL-010-008
1	1	…	…			+Party/Party Name	
1	1	…	…	…		Party Name/Name	BIIRULE-T10-R027
0	1	…	…			+Party/Postal Address/Address	EUGEN-T10-R002
0	1	…	…	…		Address/Identifier	PCL-010-003
0	1	…	…	…		Address/Postbox/Text	
1	1	…	…	…		Address/Street Name/Name	
0	1	…	…	…		Address/Additional Street Name/Name	
0	1	…	…	…		Address/Building Number/Text	
0	1	…	…	…		Address/Department/Text	
1	1	…	…	…		Address/City Name/Name	
1	1	…	…	…		Address/Postal Zone/Text	
0	1	…	…	…		Address/Country Subentity/Text	

Cardinality		Element name					Restriction
0	1	…	…	…		+Address/Country	
1	1	…	…	…	..	Country/Identification Code/Code	CL-010-004 BIIRULE-T10-R040
0	1	…	…	…		+Party/Party Tax Scheme	BIICORE-T10-R391
0	1	…	…	…		Party Tax Scheme/Company Identifier/Identifier	BIIRULE-T10-R005
1	1	…	…	…		+Party Tax Scheme/Tax Scheme	
1	1	…	…	…	..	Tax Scheme/Identifier	BIIRULE-T10-R005 CL-010-005
0	1	…	…			+Party/Party Legal Entity	
0	1	…	…	…		Party Legal Entity/Registration Name/Name	
1	1	…	…	…		Party Legal Entity/Company Identifier/Identifier	BIIRULE-T10-R041
0	1	…	…	…		+Party Legal Entity/Registration Address/Address	
0	1	…	…	…	..	Address/City Name/Name	
0	1	…	…	…	..	Address/Country Subentity/Text	
0	1	…	…	…	..	+Address/Country	
1	1	…	…	…	..	… Country/Identification Code/Code	CL-010-004
0	1	…	…			+Party/Contact	
0	1	…	…	…		Contact/Telephone/Text	
0	1	…	…	…		Contact/Telefax/Text	
0	1	…	…	…		Contact/Electronic Mail/Text	
0	1	…	…			+Party/Person	
0	1	…	…	…		Person/First Name/Name	
0	1	…	…	…		Person/Family Name/Name	
0	1	…	…	…		Person/Middle Name/Name	
0	1	…	…	…		Person/Job Title/Text	
0	1	+Invoice/Payee Party/Party					
0	1	…	+Party/Party Identification				
1	1	…	…	Party Identification/Identifier			PCL-010-008
0	1	…	+Party/Party Name				
1	1	…	…	Party Name/Name			BIICORE-T10-R388
0	1	…	+Party/Party Legal Entity				
1	1	…	…	Party Legal Entity/Company Identifier/Identifier			
0	1	+Invoice/Delivery					
0	1	…	Delivery/Actual Delivery Date/Date				
0	1	…	+Delivery/Delivery Location/Location				
0	1	…	…	Location/Identifier			PCL-010-004
0	1	…	…	+Location/Address			EUGEN-T10-R005
0	1	…	…	…	Address/Street Name/Name		
0	1	…	…	…	Address/Additional Street Name/Name		
0	1	…	…	…	Address/Building Number/Text		
0	1	…	…	…	Address/Department/Text		
1	1	…	…	…	Address/City Name/Name		
1	1	…	…	…	Address/Postal Zone/Text		
0	1	…	…	…	Address/Country Subentity/Text		
0	1	…	…	…	+Address/Country		
1	1	…	…	…	..	Country/Identification Code/Code	CL-010-004 BIIRULE-T10-R040
0	N	+Invoice/Payment Means					BIIRULE-T10-R007
1	1	…	Payment Means/Payment Means Code/Code				CL-010-006

Cardinality			Element name	Restriction
0	1	…	Payment Means/Payment Due Date/Date	BIIRULE-T10-R006
0	1	…	Payment Means/Payment Channel Code/Code	
0	1	…	Payment Means/Payment Identifier/Identifier	
0	1	…	+Payment Means/Payee Financial Account/Financial Account	BIIRULE-T10-R008
1	1	… …	Financial Account/Identifier	
0	1	… …	+Financial Account/Financial Institution Branch/Branch	
0	1	… … …	Branch/Identifier	
0	1	… … …	+Branch/Financial Institution	
1	1	… … … ..	Financial Institution/Identifier	EUGEN-T10-R004 PCL-010-002
0	1	+Invoice/Payment Terms		
0	1	…	Payment Terms/Note/Text	
0	n	+Invoice/Allowance Charge		
1	1	…	Allowance Charge/Charge Indicator/Indicator	
0	1	…	Allowance Charge/Allowance Charge Reason/Text	EUGEN-T10-R023
1	1	…	Allowance Charge/Amount	EUGEN-T10-R022
0	1	…	+ Allowance Charge/Tax Category	PEPPOL addition Org17
1	1	… …	Tax Category/Identifier	CL-010-007 BIIRULE-T10-R048 EUGEN-T10-R011 EUGEN-T10-R006
0	1	… …	Tax Category/Percent	
1	1	… …	+Tax Category/Tax Scheme	
1	1	… … …	Tax Scheme/Identifier	CL-010-005 BIIRULE-T10-R049
1	1	+Invoice/Tax Total		
1	1	…	Tax Total/Tax Amount/Amount	
0	n	…	+Tax Total/Tax Subtotal	EUGEN-T10-R008
1	1	… …	Tax Subtotal/Taxable Amount/Amount	BIIRULE-T10-R028 BIIRULE-T10-R046
1	1	… …	Tax Subtotal/Tax Amount/Amount	BIIRULE-T10-R010 BIIRULE-T10-R047
1	1	… …	+Tax Subtotal/Tax Category	
1	1	… … …	Tax Category/Identifier	CL-010-007 BIIRULE-T10-R048 EUGEN-T10-R011
0	1	… … …	Tax Category/Percent	
0	1	… … …	Tax Category/Tax Exemption Reason Code/Code	PCL-010-007
0	1	… … …	Tax Category/Tax Exemption Reason/Text	EUGEN-T10-R009
1	1	… … …	+Tax Category/Tax Scheme	BIIRULE-T10-R009
1	1	… … … ..	Tax Scheme/Identifier	CL-010-005 BIIRULE-T10-R049
1	1	+Invoice/Legal Monetary Total/Monetary Total		
1	1	…	Monetary Total/Line Extension Amount/Amount	BIIRULE-T10-R011 BIIRULE-T10-R043
1	1	…	Monetary Total/Tax Exclusive Amount/Amount	BIIRULE-T10-R012 BIIRULE-T10-R028 BIIRULE-T10-R042
1	1	…	Monetary Total/Tax Inclusive Amount/Amount	BIIRULE-T10-R013 BIIRULE-T10-R039 BIIRULE-T10-R014
0	1	…	Monetary Total/Allowance Total Amount/Amount	BIIRULE-T10-R015

Cardinality		Element name	Restriction
0	1	… Monetary Total/Charge Total Amount/Amount	BIIRULE-T10-R016
0	1	… Monetary Total/Prepaid Amount/Amount	
0	1	… Monetary Total/Payable Rounding Amount/Amount	
1	1	… Monetary Total/Payable Amount/Amount	BIIRULE-T10-R017 BIIRULE-T10-R038 EUGEN-T10-R019
1	n	+Invoice/Invoice Line	BIIRULE-T10-R033

Table 2 Information Elements in a Core Invoice Header

5.2.2 BIS 4a – The Invoice line

The following table shows the content of the core invoice line:

Cardinality		Element name	Restriction
1	1	Invoice Line/Identifier	BIIRULE-T10-R032
0	1	Invoice Line/Note/Text	
0	1	Invoice Line/Invoiced Quantity/Quantity	Org03 EUGEN-T10-R003
1	1	Invoice Line/Line Extension Amount/Amount	BIIRULE-T10-R018 BIIRULE-T10-R050
0	1	Invoice Line/Accounting Cost/Text	
0	N	+Invoice Line/Order Line Reference	
1	1	… Order Line Reference/Line Identifier/Identifier	
0	N	+Invoice Line/Allowance Charge	
1	1	… Allowance Charge/Charge Indicator/Indicator	
0	1	… Allowance Charge/Allowance Charge Reason/Text	
1	1	… Allowance Charge/Amount	
0	1	+Invoice Line/Tax Total	
1	1	… Tax Total/Tax Amount/Amount	
1	1	+Invoice Line/Item	
0	1	… Item/Description/Text	
1	1	… Item/Name	BIIRULE-T10-R025 BIIRULE-T10-R019
0	1	… +Item/Sellers Item Identification/Item Identification	
1	1	… … Item Identification/Identifier	
0	1	… +Item/Standard Item Identification/Item Identification	BIIRULE-T10-R020
1	1	… … Item Identification/Identifier	PCL-010-005
0	N	… +Item/Commodity Classification	BIIRULE-T10-R021
0	1	… … Commodity Classification/Item Classification Code/Code	PCL-010-006
0	1	… +Item/Classified Tax Category/Tax Category	
1	1	… … Tax Category/Identifier	CL-010-007 BIIRULE-T10-R048 EUGEN-T10-R011
0	1	… … Tax Category/Percent	
1	1	… … +Tax Category/Tax Scheme	
1	1	… … … Tax Scheme/Identifier	CL-010-005 BIIRULE-T10-R049
0	N	… +Item/Additional Item Property/Item Property	
1	1	… … Item Property/Name	
1	1	… … Item Property/Value/Text	

1	1		+Invoice Line/Price	
1	1	…	Price/Price Amount/Amount	BIIRULE-T10-R022
0	1	…	Price/Base Quantity/Quantity	
0	1	…	+Price/Allowance Charge	
1	1	…	.. Allowance Charge/Charge Indicator/Indicator	
0	1	…	.. Allowance Charge/Allowance Charge Reason/Text	
0	1	…	.. Allowance Charge/Multiplier Factor/Numeric	
1	1	…	.. Allowance Charge/Amount	
0	1	…	.. Allowance Charge/Base Amount/Amount	

Table 3 Information Elements in a Core Invoice Transaction Line

5.2.3 Syntax mapping to UBL

The UBL schema for invoice can be downloaded from link [UBL_Invoice].

5.3   BIS 4a – Basic Invoice Only, Business Rules (BiiCoreTrdm010)

The PEPPOL ruleset is a set of rules that clarify the content by stating mandatory fields, content rules like codelists, calculation rules and dependency rules for individual fields. Issuers of orders that produce messages that do not contradict any of these rules can be certain that anyone claiming conformance to PEPPOL can receive and process these messages.

PEPPOL has stated the following abstract rule in order to facilitate interoperability in cross border trade as well as compliance to EU legal directives. The rules are grouped into four sections depending on their scope and origin. It is important for implementers to note that documents issued by PEPPOL participants claiming conformance, MUST conform to the business rules stated in this BIS.

All the following rules have accompanying error level that can be stated as:
- warning   the rule points to an issue that would provide clarifying or information that increases consistency and aids interoperability. The rule should be applied to the message.
  - A sender of message should NOT send messages that might raise warnings.
  - Receivers of messages should not reject messages that raise warnings.
- fatal   the rule point to a major issue of consistency or data correctness.
  - A sender of message should NOT send messages that will raise fatal errors.
  - Receivers of messages can be expected to reject messages that raise fatal errors.

As support for implementers PEPPOL has made available:
- A Schematron implementation of the rules
- PEPPOL document validation service.

See [PEPPOL_PostAward] for more information.

5.3.1 BII Core Rules (biicore)

These are BII rules that are concerned with the CORE invoice data model. This set of rules is syntax specific and reflects PEPPOL use of mapping to UBL 2.0. It restricts use of classes by changing their cardinality.

The mapping of rules to Schematron also identifies rules of checking for presence of additional content that is not part of the core specifications. These rules are not listed here since they are not part of the specifications.

Rule No.	Rule	Error level
BIICORE-T10-R001	An invoice SHOULD not contain empty elements.	warning
BIICORE-T10-R387	Element 'PartyIdentification' may occur at maximum 1 times.	warning
BIICORE-T10-R388	Element 'PartyName' must occur exactly 1 times.	warning

BIICORE-T10-R389	Element 'PartyTaxScheme' may occur at maximum 1 times.	warning
BIICORE-T10-R390	Element 'PartyIdentification' may occur at maximum 1 times.	warning
BIICORE-T10-R391	Element 'PartyName' must occur exactly 1 times.	warning
BIICORE-T10-R392	Element 'PostalAddress' must occur exactly 1 times.	warning
BIICORE-T10-R393	Element 'PartyTaxScheme' may occur at maximum 1 times.	warning
BIICORE-T10-R394	Element 'TaxTotal' may occur at maximum 1 times.	warning
BIICORE-T10-R395	Element 'Price' must occur exactly 1 times.	warning
BIICORE-T10-R396	Element 'Description' may occur at maximum 1 times.	warning
BIICORE-T10-R397	Element 'Name' must occur exactly 1 times.	warning
BIICORE-T10-R398	Element 'ClassifiedTaxCategory' may occur at maximum 1 times.	warning
BIICORE-T10-R399	Element 'AllowanceCharge' may occur at maximum 1 times.	warning
BIICORE-T10-R400	Element 'TaxExclusiveAmount' must occur exactly 1 times.	warning
BIICORE-T10-R401	Element 'TaxInclusiveAmount' must occur exactly 1 times.	warning
BIICORE-T10-R402	Element 'PartyIdentification' may occur at maximum 1 times.	warning
BIICORE-T10-R403	Element 'PartyName' may occur at maximum 1 times	warning
BIICORE-T10-R404	Element 'ID' must occur exactly 1 times.	warning

5.3.2 BII Profile Rules (biiprofile)

These are BII rules that are concerned with profile level issues. They respond to the ProfileID in an invoice.

Rule No.	Rule	Error level
BIIPROFILE-T10-R001	An invoice transaction T10 MUST only be used in BIS 4, 5 or 6.	fatal
BIIPROFILE-T10-R002	An invoice transaction T10 in BIS 6 MUST have an order reference identifier.	fatal

5.3.3 BII and PEPPOL Semantic Rules (biirules and eugen)

These are the rules that BII and PEPPOL have identified that are concerned with the semantics of the data. They are the European common ordering rules identified. These are issues like rules on content, dependency and calculations. BII rules have the "BIIRULE" prefix while PEPPOL rules are prefixed with "EUGEN". For readability the rules are grouped together by scope.

General rules:

Rule No.	Rule	Error level
BIIRULE-T10-R029	An invoice MUST have a syntax identifier.	fatal
BIIRULE-T10-R030	An invoice MUST have a customization identifier.	fatal
BIIRULE-T10-R031	An invoice MUST have a profile identifier.	fatal
BIIRULE-T10-R023	An invoice MUST have the date of issue.	fatal
BIIRULE-T10-R024	An invoice MUST have an invoice number.	fatal
BIIRULE-T10-R034	An invoice MUST have a currency code for the document.	fatal
EUGEN-T10-R024	Currency Identifier MUST be stated in the currency stated on header level.	fatal
BIIRULE-T10-R035	Any reference to an order MUST specify the order identifier.	fatal
BIIRULE-T10-R036	Any reference to a contract MUST specify the contract identifier.	fatal
BIIRULE-T10-R037	Any reference to a document MUST specify the document identifier.	fatal

BIIRULE-T10-R001	An invoice period end date MUST be later or equal to an invoice period start date	fatal
EUGEN-T10-R020	If the invoice refers to a period, the period MUST have an start date.	fatal
EUGEN-T10-R021	If the invoice refers to a period, the period MUST have an end date.	fatal

Parties:

Rule No.	Rule	Error level
BIIRULE-T10-R026	An invoice MUST contain the full name of the supplier.	fatal
BIIRULE-T10-R027	An invoice MUST contain the full name of the customer.	fatal
EUGEN-T10-R001	A supplier postal address in an invoice SHOULD contain at least, Street name and number, city name, zip code and country code.	warning
EUGEN-T10-R002	A customer postal address in an invoice SHOULD contain at least, Street name and number, city name, zip code and country code.	warning
BIIRULE-T10-R003	In cross border trade the VAT identifier for the supplier should be prefixed with country code.	warning
BIIRULE-T10-R005	In cross border trade the VAT identifier for the customer should be prefixed with country code.	warning
BIIRULE-T10-R040	Country in an address MUST be specified using the country code.	fatal
BIIRULE-T10-R041	Company identifier MUST be specified when describing a company legal entity.	fatal
EUGEN-T10-R005	A Delivery address in an invoice SHOULD contain at least, city, zip code and country code.	warning

Calculation rules:

Rule No.	Rule	Error level
BIIRULE-T10-R018	Invoice line amount MUST be equal to the price amount multiplied by the quantity plus charges minus allowances at line level	fatal
BIIRULE-T10-R011	Invoice total line extension amount MUST equal the sum of the line totals	fatal
BIIRULE-T10-R015	Total allowance MUST be equal to the sum of allowances at document level	fatal
BIIRULE-T10-R016	Total charges MUST be equal to the sum of document level charges.	fatal
BIIRULE-T10-R010	Each tax total MUST equal the sum of the tax subcategory amounts.	fatal
BIIRULE-T10-R028	If the VAT total amount in an invoice exists then the sum of taxable amount in sub categories MUST equal the sum of invoice tax exclusive amount.	fatal
BIIRULE-T10-R012	Invoice tax exclusive amount MUST equal the sum of lines plus allowances and charges on header level.	fatal
BIIRULE-T10-R013	Invoice tax inclusive amount MUST equal the tax exclusive amount plus all tax total amounts and the rounding amount.	fatal
BIIRULE-T10-R017	Amount due is the tax inclusive amount minus what has been prepaid.	fatal
BIIRULE-T10-R038	An invoice MUST specify the total payable amount.	fatal
BIIRULE-T10-R039	An invoice MUST specify the total amount with taxes included.	fatal
BIIRULE-T10-R042	An invoice MUST specify the total amount without taxes.	fatal
BIIRULE-T10-R043	An invoice MUST specify the sum of the line amounts.	fatal
EUGEN-T10-R019	Total payable amount in an invoice MUST NOT be negative	fatal

| BIIRULE-T10-R014 | Tax inclusive amount in an invoice MUST NOT be negative | fatal |
| BIIRULE-T10-R022 | Prices of items MUST NOT be negative. | fatal |

Taxes:

Rule No.	Rule	Error level
BIIRULE-T10-R009	An invoice MUST have a tax total referring to a single tax scheme	fatal
BIIRULE-T10-R046	An invoice MUST specify the taxable amount per VAT subtotal.	fatal
BIIRULE-T10-R047	An invoice MUST specify the tax amount per VAT subtotal.	fatal
BIIRULE-T10-R048	Every tax category MUST be defined through an identifier.	fatal
BIIRULE-T10-R049	Every tax scheme MUST be defined through an identifier.	fatal
EUGEN-T10-R007	If the VAT total amount in an invoice exists it MUST contain the suppliers VAT number.	fatal
EUGEN-T10-R011	If the VAT total amount in an invoice exists then each invoice line item MUST have a VAT category ID.	fatal
EUGEN-T10-R006	If the VAT total amount in an invoice exists then an Allowances Charges amount on document level MUST have Tax category for VAT.	fatal
EUGEN-T10-R009	If the category for VAT is exempt (E) then an exemption reason SHOULD be provided.	warning
EUGEN-T10-R008	For each tax subcategory the category ID and the applicable tax percentage MUST be provided.	fatal
EUGEN-T10-R015	IF VAT = "AE" (reverse charge) THEN it MUST contain Supplier VAT id and Customer VAT	fatal
EUGEN-T10-R016	IF VAT = "AE" (reverse charge) THEN VAT MAY NOT contain other VAT categories.	warning
EUGEN-T10-R017	IF VAT = "AE" (reverse charge) THEN The taxable amount MUST equal the invoice total without VAT amount.	fatal
EUGEN-T10-R018	IF VAT = "AE" (reverse charge) THEN VAT tax amount MUST be zero.	fatal

Products and services:

Rule No.	Rule	Error level
BIIRULE-T10-R033	An invoice MUST specify at least one line item.	fatal
BIIRULE-T10-R032	Invoice lines MUST have a line identifier.	fatal
BIIRULE-T10-R025	Each invoice line MUST contain the product/service name	fatal
BIIRULE-T10-R050	Invoice lines MUST have a line total amount.	fatal
EUGEN-T10-R003	Each invoice line SHOULD contain the quantity and unit of measure	warning
BIIRULE-T10-R019	Product names SHOULD NOT exceed 50 characters long	warning
BIIRULE-T10-R020	If standard identifiers are provided within an item description, a Scheme Identifier SHOULD be provided (e.g. GTIN)	warning
BIIRULE-T10-R021	Classification codes within an item description SHOULD use a standard scheme for codes (e.g. CPV or UNSPSC)	warning

Payment:

Rule No.	Rule	Error level
BIIRULE-T10-R006	Payment means due date in an invoice SHOULD be later or equal than issue date.	warning

BIIRULE-T10-R007	If payment means is funds transfer, invoice MUST have a financial account	warning
BIIRULE-T10-R008	If bank account is IBAN the bank identifier SHOULD also be provided.	warning
BIIRULE-T10-R044	When specifying payment means, the invoice MUST specify the payment means code	fatal
EUGEN-T10-R004	If the payment means are international account transfer and the account id is IBAN then the financial institution SHOULD be identified by using the BIC id.	warning
EUGEN-T10-R010	If payee information is provided then the payee name MUST be specified.	fatal

Allowance and Charges:

Rule No.	Rule	Error level
EUGEN-T10-R022	An allowance or charge amount MUST NOT be negative.	fatal
EUGEN-T10-R023	AllowanceChargeReason text SHOULD be specified for all allowances and charges	warning

5.4 Identifiers, mapping of requirements to semantic model

PEPPOL has no intention of developing a new policy on identifying Parties. The strategy is to recognize a range of different identification schemes and provide a code list of those recognized schemes based on international standards. For further information, see PEPPOL "Policy for Using Identifiers" [PEPPOL_Transp].

Requirement Org21   Policy 8

Policy 8 is implemented as a set of code list rules. See Ch 5.5 on code lists.
      PCL-010-008
      PCL-010-009

Examples of usage in PartyIdentification:

```
<cac:PartyIdentification>
      <cbc:ID schemeID="GLN">4035811991014</cbc:ID>
</cac:PartyIdentification>
```

The following examples denotes that the Issuing Agency is DK:CVR in the PEPPOL set of Issuing Agency Codes. This means that the party has the Danish CVR identifier DK87654321.

Examples of usage in PartyIdentification and Endpoint ID:

```
<cbc:EndpointId ID schemeID="DK:CVR">DK87654321</cbc:EndpointId>
```

```
<cac:PartyIdentification>
      <cbc:ID schemeID="DK:CVR">DK87654321</cbc:ID>
</cac:PartyIdentification>
```

Requirement Org22   Policy 11

Policy 11 mandates that PEPPOL Customization Identifiers MUST follow the syntax:
      <transactionId>:# <extensionId>[#<extensionId>]

The following example identifies SubmitInvoice within "PEPPOL BIS 4a" as extension to the BII BiiCoreTrdm010 data model:

```
urn:www.cenbii.eu:transaction:biicoretrdm010:ver1.0:#urn:www.peppol.eu:bis:peppol4a:ver1.0
```

Where:
- ▸ Transaction ID: `urn:www.cenbii.eu:transaction:biicoretrdm010:ver1.0`
- ▸ Extension ID: `urn:www.peppol.eu:bis:peppol4a:ver1.0`
- ▸ Please be aware of the different usage of letter "l" and number "1".

For implementers: Please note that CustomizationID element in the document instance MUST correspond to the Customization ID of the SMP Document Identifier.

Requirement Org23   Policy 12

Policy 12 is implemented as follows:
- ▸ CustomizationID element MUST follow Policy 11 (see, requirement Org22):
- ▸ schemeID MUST equal "PEPPOL"

Example of usage:
```
<cbc:CustomizationID schemeID="PEPPOL">
urn:www.cenbii.eu:transaction:biicoretrdm010:ver1.0:#urn:www.peppol.eu:bis:peppol4a:ver1.0
</cbc:CustomizationID>
```

Requirement Org24   Policy 16

Policy 16 mandates that process identifiers MUST match the BII profile ID.

As an example the following process identifier is used for —BII04 - Invoice only:
```
<cbc:ProfileID>urn:www.cenbii.eu:profile:bii04:ver1.0</cbc:ProfileID>
```

For implementers: Please note that process identifiers in the document instance MUST correspond to the SMP process identifier.

5.5   SubmitInvoice - Code Lists

A number of information elements values are constrained to be those in a list of codes known as Code Lists. The specific Code Lists used for this transaction must be common between business partners in order to achieve interoperability. The following section lists the code lists identified by CEN BII and PEPPOL to be used in the PEPPOL BIS.

More information about PEPPOL use of code lists can be found at [PEPPOL_PostAward].

5.5.1 BII Code list rules (biirules-CodeLists)

The following rules regarding code lists are stated in BII documentation.

Rule ID	Rule description	Severity
CL-010-001	An invoice MUST use InvoiceTypeCode code value 380="Commercial Invoice"	fatal
CL-010-002	DocumentCurrencyCode MUST be coded using ISO code list 4217 Alpha	fatal
CL-010-003	CurrencyID MUST be coded using ISO code list 4217 Alpha	fatal
CL-010-004	Country codes in an invoice MUST be coded using ISO code list 3166-1	fatal
CL-010-005	Invoice tax schemes MUST be coded using UN/ECE code list 5153	warning
CL-010-006	Payment means in an invoice MUST be coded using CEFACT code list 4461	warning
CL-010-007	Invoice tax categories MUST be coded using UN/ECE code list 5305	warning

5.5.2 PEPPOL Code list rules (eugen-CodeLists)

The following additional code list rules are applied for PEPPOL implementations in addition to the BII rules

Rule ID	Rule description	Severity
PCL-010-001	Mime code in attribute MUST be MIMEMediaType.	fatal
PCL-010-002	If FinancialAccountID is IBAN then Financial InstitutionID SHOULD be BIC code	warning
PCL-010-003	Postal address identifiers SHOULD be GLN.	warning
PCL-010-004	Location identifiers SHOULD be GLN	warning
PCL-010-005	Standard Item identifiers SHOULD be GTIN.	warning
PCL-010-006	Commodity classification codes SHOULD be one of UNSPSC, eClass or CPV.	warning
PCL-010-007	Tax exemption reasons MUST be coded using Use CWA 15577 tax exemption code list. Version 2006	fatal
PCL-010-008	Party Identifiers MUST use the PEPPOL PartyID list	fatal
PCL-010-009	Endpoint Identifiers MUST use the PEPPOL PartyID list.	fatal

5.6 PEPPOL extensions - validation rules for national requirements

In many cases this PEPPOL BIS is sufficient for managing the exchange of documents from issuer to receiver without any previous bi-lateral agreements. The strict set of rules ensures common understanding of most important information elements within an invoice. In other cases the contractual arrangement between the parties requires adaption, like additional requirements on sender to apply further restrictions or provide additional information elements to the invoice document. Such an extension is a "set" of one or more business rules that can be applied to a message in order to achieve a specific objective that is not specifically supported by the core message specification. In CEN BII terminology this is called an extension.

To conform with PEPPOL specifications, an extension may not conflict with the core specification, i.e. a message that can be validated with an extension must also validate with the CENBII core specifications. Extensions can be used to modify the data model and the business rules but not for adding or removing transactions/message to the message flow specified in the relevant BIS document.
Extensions can involve different changes but most commonly they are concerned with:
- Restricting the cardinality of elements that are optional in the core message specification.
- Requiring elements that are not in the core message specification.
- Applying co-occurrence rules on elements and calculation rules.
- Restricting code list values.

In line with this approach, various PEPPOL participants have developed a set of business rules that clarify national requirement placed on issuers of invoices within their legal regime. These rules are also available as Schematron and can be used for validation of documents.

For further information on extensions and national rules for PEPPOL invoices, see [PEPPOL_PostAward] for more information.

6 Technical Interaction Interoperability – Process and Semantic Implementation

Based on CEN BII results, a syntax binding of this PEPPOL BIS to the UBL 2.0 syntax is available to implementers. For more information about UBL see [UBL].

All document instances conformant to this PEPPOL BIS must be:
- ► Capable of validation against the UBL 2.0 Schema, see [UBL_Invoice].
- ► Conform to all business rules provided in this BIS

As support for implementers PEPPOL has made available:
- ► XSLT Stylesheet for presentation of content.
- ► Examples of PEPPOL Invoices
- ► Guidelines on use for implementers

See [PEPPOL_PostAward] for more information.

A valid XML instance conformant to this BIS is identified by the following XML fragment.

```
<Invoice xmlns="urn:oasis:names:specification:ubl:schema:xsd:Invoice-2"
xmlns:cac="urn:oasis:names:specification:ubl:schema:xsd:CommonAggregateComponents-2"
xmlns:cbc="urn:oasis:names:specification:ubl:schema:xsd:CommonBasicComponents-2"
xmlns:ccts="urn:un:unece:uncefact:documentation:2"
xmlns:ext="urn:oasis:names:specification:ubl:schema:xsd:CommonExtensionComponents-2"
xmlns:qdt="urn:oasis:names:specification:ubl:schema:xsd:QualifiedDatatypes-2"
xmlns:udt="urn:un:unece:uncefact:data:specification:UnqualifiedDataTypesSchemaModule:2">
    <cbc:UBLVersionID>2.0</cbc:UBLVersionID>
    <cbc:CustomizationID schemeID="PEPPOL">

    urn:www.cenbii.eu:transaction:biicoretrdm010:ver1.0:#urn:www.peppol.eu:bis:peppol4a:ver1.0
    </cbc:CustomizationID>
    <cbc:ProfileID>urn:www.cenbii.eu:profile:bii04:ver1.0</cbc:ProfileID>
     …
```

Document implementation guidelines are available for number of transactions at [PEPPOL_PostAward].

7 Technical Interaction Interoperability - eSignature Validation

PEPPOL enforces no legal requirements on digital signatures for end-to-end checking of:
- ► Integrity
- ► Authenticity
- ► Non repudiation

And as such PEPPOL eInvoices do not require the eSignatures. However, if eInvoices are digitally signed the recipient party (e.g. Contracting Authority) may wish to use the PEPPOL Digital Signature Validation service to confirm validity of the certificate used for the signature.

8 Technical Interaction Interoperability - Transport

The method of delivering data over the PEPPOL transport infrastructure is defined by the BusDox specification that guarantees the authenticity of the origin and the integrity of their content by fulfilling the requirements of electronic data interchange (EDI), as defined in Article 2 of Commission Recommendation 1994/820/EC of 19 October 1994, see [DIR_2006/112/EC]. .

PEPPOL requires all eInvoices to be transported using the PEPPOL Transport Infrastructure. This uses a transport model based on the BusDox version 1.0 specification suite that can be implemented as a four corner model and ensures communication of business documents in a secure and reliable way.

The use of this PEPPOL BIS is dependent on the connection of both participants to the PEPPOL Transport Infrastructure. From the perspective of the services, the receiving participant (e.g. the Contracting Authority) must register their support for PEPPOL BIS 4a in a PEPPOL recognized SMP.

More information on the PEPPOL Technical infrastructure can be found on [PEPPOL_Transp].