



# **Table of content**

| 1 | Int   | roduction  | 4  |
|---|-------|--|----|
|   | 1.1   | Background and Objective                                   | 4  |
|   | 1.2   | Target audience  | 5  |
|   | 1.3   | Document structure   | 5  |
|   | 1.4   | Mandatory use  | 5  |
| 2 | Do    | cument history   | 6  |
| 3 | EH    | F – Elektronisk handelsformat (electronic commerce format) | 7  |
|   | 3.1   | About EHF  | 7  |
|   | 3.2   | Information Consistency                                    | 7  |
|   | 3.3   | Empty elements   | 8  |
|   | 3.4   | Message transport  | 8  |
|   | 3.5   | Message level response                                     | 8  |
|   | 3.6   | Profiles and messages                                      | 9  |
|   | 3.7   | Use of collaboration agreements                            | 9  |
|   | 3.8   | Versioning   | 10 |
|   | 3.8.3 | 1 . Main version   | 10 |
|   | 3.8.2 | 2 . Sub version  | 10 |
|   | 3.8.3 | 3 . Revision   | 10 |
| 4 | De    | finitions  | 11 |
| 5 | Or    | dering process and business requirements                   | 12 |
|   | 5.1   | About the Order messages                                   | 12 |
|   | 5.2   | Functionality and Roles                                    | 12 |
|   | 5.3   | Profiles and messages                                      | 12 |
|   | 5.3.  | 1 . ProfileID  | 13 |
|   | 5.4   | Ordering process   | 13 |
| 6 | De    | escription of selected parts of the EHF Order formats      | 15 |
|   | 6.1   | Order  | 15 |
|   | 6.1.  | 1 . Roles and Actors                                       | 15 |
|   | 6.1.2 | 2 . Product Identification                                 | 16 |
|   | 6.1.3 | 3 . Product Name and Description                           | 17 |
|   | 6.1.4 | 4 . Quantities and units                                   | 17 |
|   | 6.1.  | 5 . Prices   | 18 |
|   | 6.1.6 | 6 . Attachments  | 18 |
|   | 6.1.  | 7 . Environment, Social responsibility and ecological      | 19 |
|   | 6.1.8 | 8 . Additional Item properties                             | 19 |
|   | 6.2   | Order Response   | 21 |
|   | 6.2.  | 1 . Response Code  | 21 |
|   |       | 2 . Order reference  | 22 |
|   | 6.2.3 | 3 . Order response with changes                            | 22 |
| 7 |       | Formation content  | 24 |
|   | 7.1   | Order information content                                  | 25 |
|   | 7.2   | Order Response information content                         |    |
| 8 | Va    | lidation   |    |
|   | 8.1   | Validation principles                                      |    |



# Implementation Guide EHF Ordering version 1.0.1

|   | 8.2   | Dynamic validation                                 | 40 |
|---|-------|--|----|
|   | 8.3   | Validation rules per ProfileID and CustomizationID | 41 |
|   | 8.4   | Validation rules                                   | 42 |
|   | 8.4.1 | . Order  | 42 |
|   | 8.4.2 | . Order Response                                   | 46 |
| 9 | Atta  | chments  | 48 |
|   | 9.1   | Attachment 1 – Structure table                     | 48 |
|   | 9.2   | Attachment 2 – Message table                       | 48 |
|   | 9.3   | Attachment 3 – Code lists                          | 48 |
|   | 9.4   | Attachment 4 - UBL 2.1 Schema                      | 48 |
|   | 9.5   | Attachment 5 – Schematron files                    | 48 |
|   | 9.6   | Attachment 6 – Example files                       | 48 |



## 1 INTRODUCTION

This document describes the EHF Order and Order Response formats to be used for the exchange of order information between trading partners. It is prepared as part of the initiative taken by the Norwegian "Agency for Public Management and eGovernment" (Difi) within the standardization of electronic trade processes. The following formats are or will be defined:

- EHF Invoice and Credit Note
- EHF Catalogue (pre-award and post-award)
- EHF Order and Order Response
- EHF Despatch Advice

The EHF formats are based on CEN BII<sup>1</sup> with a syntax binding to Universal Business Language (UBL)<sup>2</sup>. Invoice and Credit Note are based on UBL 2.0, while other formats are based on UBL 2.1. UBL is an open standard with no license fees and the same goes for EHF. EHF is maintained by Difi.

#### 1.1 BACKGROUND AND OBJECTIVE

The Norwegian government has played an active role in the dissemination of electronic commerce both in domestic and foreign trade. The government white paper labeled "St.Meld. nr. 36 (2008-2009) Det gode innkjøp" (The good procurement), states among other things:

«It's the Government's opinion that increased use of electronic solutions is important to improve and increase the efficiency of public procurement. The use of electronic solutions may reduce time spent on public procurement, increase the competition and arrange for purchases to be more transparent and easier to re-examine. By spending less time and money on procurement, resources will be available for both modernizing the public sector and more welfare.

The goal for introducing electronic solutions is to contribute to a better, simpler and more secure procurement. »

The «Ministry of Government Administration, Reform and Church Affairs» (FAD) considers use of open standards as a vital means to build a well-functioning public administration, with good internal collaboration and a high level of service for both inhabitants and businesses.

## **Definition of Open Standard:**

An open standard is characterized by its reputation and will be maintained by a non-commercial organisation, and the continuing development is based on decision processes open to every interested party. The standard is published and the documentation is available, either free of charge or for a small, insignificant fee. Anyone must be allowed to copy, distribute and use the standard free of charge or for a

EHF Ordering 2014-09-02 Page 4 of 48

<sup>1</sup> http://www.cen.eu/cwa/bii/specs/

<sup>&</sup>lt;sup>2</sup> http://www.oasis-open.org/committees/tc\_home.php?wg\_abbrev=ubl



small, insignificant fee. The intellectual rights related to the standard (e.g. patents) are irrevocably available, without any royalties. There is no reservation regarding re-use of the standard.<sup>3</sup>

**The purpose** of this document is to describe a common format for Order messages in the Norwegian market, and to facilitate an efficient implementation and increased use of electronic collaboration regarding the invoicing process based on this format

#### 1.2 TARGET AUDIENCE

The target audience for this implementation guide (hereafter called IG) is both technical and non-technical personnel involved in the exchange of Order messages. The IG may also be used by system providers and message brokers.

- Chapters 1 to 6 are directed to non-technical personnel
- Chapters 7 to 9 (appendices) are directed to technical personnel

## 1.3 DOCUMENT STRUCTURE

The document consists of the following parts:

- Chapter 1 outlines the background and objective for the document.
- Chapter 2 contains document history.
- Chapter 3 describes the principles and conditions for EHF.
- Chapter 4 contains definitions.
- Chapter 5 describes the ordering process.
- Chapter 6 describes selected parts of the formats.
- Chapter 7 contains the information contents of the messages.
- Chapter 8 describes the validation of the messages.
- Chapter 9 contains the following references to separate documents:
  - Appendix 1: Message structure (branching tree)
  - o Appendix 2: Message description
  - Appendix 3: Code lists
  - o Appendix 4: Link to UBL 2.1 Schema for Order and Order Response
  - o Appendix 5: Schematron files
  - Appendix 6: XML Example files

#### 1.4 MANDATORY USE

Implementation Guide EHF Ordering version 1.0 is compliant with CEN BII2 and Peppol BIS 28A Ordering version 2.0.

EHF Ordering 2014-09-02 Page 5 of 48

<sup>&</sup>lt;sup>3</sup> http://no.wikipedia.org/wiki/%C3%85pen standard



## 2 DOCUMENT HISTORY

| Version | Comment  | Author            | Approved by | Date       |
|---------|--|-------------------|-------------|------------|
| 1.0.1   | <ul> <li>Changed error message and error type for         DocumentCurrencyCode in chapter 8</li> <li>Described use of code ZZZ for PartyID in chapter 6.1.1</li> <li>Added chapter 3.3</li> <li>Added rules for currencyID, mimeCode, Endpoint Identifier scheme and Party identifier scheme.</li> <li>Added rule for correct use of Profile ID</li> </ul> | Edisys Consulting | Difi        | 2014-09-02 |
| 1.0     | Approved   | Edisys Consulting | Difi        | 2013-09-25 |



## 3 EHF – ELEKTRONISK HANDELSFORMAT (ELECTRONIC COMMERCE FORMAT)

#### 3.1 ABOUT EHF

EHF is an anagram of the Norwegian expression «<u>E</u>lektronisk <u>h</u>andels<u>f</u>ormat» (Electronic Commerce Format).

EHF is based on the work performed by CEN BII<sup>4</sup>. This is further adjusted to comply with the Norwegian accounting regulations and current practices for the different business processes in the Norwegian market. Difi pursues the goal to cover the full trading process using EHF documents, both before and after the signing of a contract.

Documents, from the tender catalogue to the credit note will be gathered under the EHF umbrella. During 2013 Difi will prepare for the use of EHF formats in what is known as the post award process, i.e. the part of the business process that starts when a supplier and a customer have signed a contract.

By using the EHF documents the collaboration between the supplier and the customer will be predictable. Elements from the tender Catalogue will be re-used in the Order, and elements from the Order will be re-used in the Invoice. This leads to a holistic use of all the documents under the EHF umbrella.

Difi has chosen to use CEN BII<sup>5</sup> as a base for the EHF formats and the Universal Business Language (UBL) <sup>6</sup> as a foundation for the implemented syntax. Both EHF and UBL are open standards and as such not liable to any licensing fees or royalties.

EHF is managed and maintained by Difi.

#### 3.2 INFORMATION CONSISTENCY

The different EHF formats mentioned above contain a number of common information elements (supplier, customer, item etc.). It is important to preserve consistency in those common information elements, and that means that elements with identical content are declared in the same way and as far as possible given the same element tag name.

EHF invoicing formats will for instance re-use elements from the Catalogue and Order to ensure consistency between the messages and to make sure that the information from the business transactions are reflected in the invoicing documents. This makes it possible to implement an efficient and automated control of the invoice and the originating transactions.

EHF Ordering 2014-09-02 Page 7 of 48

<sup>4</sup> http://www.cen.eu/cwa/bii/specs/

<sup>&</sup>lt;sup>5</sup> http://www.cen.eu/cwa/bii/specs/

<sup>&</sup>lt;sup>6</sup> http://www.oasis-open.org/committees/tc\_home.php?wg\_abbrev=ubl



#### 3.3 EMPTY ELEMENTS

Sending empty elements (tags) are not allowed in UBL-messages since these can be interpreted differently by sender and receiver. Empty elements can also caouse errors in validation of numeric fields and date-fields.

Rule: Use of empty elements is not allowed in EHF.

#### 3.4 MESSAGE TRANSPORT

Open PEPPOL Transport Infrastructure will provide an efficient use and transport of the EHF formats. The objective is to make it easy for parties in different countries to do cross-border trade. Experience shows that it is easy to implement electronic messaging in Norway, because most of the service providers use standard processes.

It must be noted that every document scheduled for this infrastructure must be validated with no errors by Difi's own validation service. This is likely to be done by the document issuer or by the service provider on behalf of the document issuer.

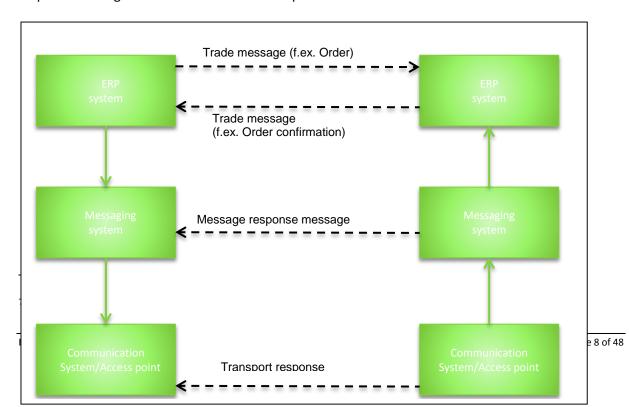
According to circular P-10/2012<sup>7</sup> FAD recommends all central government agencies to use this transport infrastructure.

#### 3.5 MESSAGE LEVEL RESPONSE

The response message (Message Level Response) is an optional response message that the receiver of an electronic message, like an EHF Invoice, may use to:

- a) Acknowledge the reception of a message and/or
- b) Report any validation discrepancies in the received message.

The response message should be perceived as a technical response message being exchanged between the two parties' messaging systems and used in addition to any other business oriented response messages described in the different profiles.





The response message will be documented in a separate EHF implementation guide.

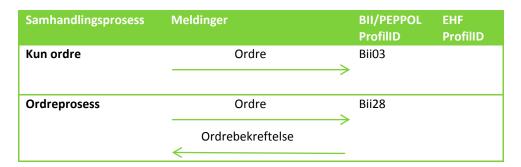
The ability to receive a response message must be registered in ELMA along with every other electronic message.

#### 3.6 PROFILES AND MESSAGES

In line with the underlying methodology for the EHF formats (cf. <a href="www.cenbii.eu">www.cenbii.eu</a>) the electronic messages included in a specific format will be exchanged between the parties as a part of an electronic collaboration process; a profile.

CEN BII has defined a profile as "A specification of how one or more business processes are executed by specifying the business rules governing its business collaborations and the information content (data model) of the electronic business transactions exchanged."

To the largest extent the EHF is using profiles prepared by BII (ref <a href="www.cenbii.eu">www.cenbii.eu</a>) or PEPPOL (cf. <a href="www.peppol.eu">www.peppol.eu</a>). Examples of relevant profiles are:



The messages being exchanged within a profile are customized to comply with the requirements given for that particular business document. A CustomizationID is used to identify the business rules that apply to the document in question, i.e. the whole set of business rules the document issuer founded the document on.

The example CustomizationID below indicates that the contents of the current message is based on business rules determined by BII (urn:www.cenbii.eu:transaction:biitrns001:ver2.0), customized for Norway in Implementation Guide for EHF Ordering (urn:www.difi.no:ehf:ordre:ver1.0).

<urn:www.cenbii.eu:transaction:biitrns001:ver2.0:extended:urn:www.peppol.eu:bis:peppol28a:ver1.0:extende
d:urn:www.difi.no:ehf:ordre:ver1.0>

## 3.7 USE OF COLLABORATION AGREEMENTS

EHF Ordering 2014-09-02 Page 9 of 48



The combination of the ELMA registration and the implementation guides referred to in that context eliminates the need for any formal collaboration agreement between the sender and the receiver. The ELMA registration verifies that an actor has declared the ability and the commitment to receive business documents composed according to the specific implementation guide, and any party is free to send the business document to this actor.

Exchanging Catalogue and Order requires no registration in ELMA, and actors are advised to include the use of electronic messages in the purchase contract or to supply an collaboration agreement<sup>8</sup> as an attachment, in order to link the electronic collaboration with the mercantile regulations and thus achieve a regularly revision of the electronic process.

#### 3.8 VERSIONING

Difi claims the right to exchange the current format with a new one as and when needed. If so, Difi will inform the public via the web site and their registered users via e-mail.

Difi manages the formats in this way:

## 3.8.1 MAIN VERSION

A new main version will be announced at least 5 months prior to release. When a main version is released, there will be at least a 12 months implementation period before the new version is made mandatory.

Difi intends to relate every main version to the regulations concerning IT standards in the public sector.

#### 3.8.2 SUB VERSION

A new sub version will be announced at least 3 months prior to release and is made mandatory 5 months after release.

All sub versions must be backwards compatible. 2 months after the new sub version has become mandatory, the support (validation service and implementation guide) is ceased for preceding versions.

### 3.8.3 REVISION

A revision is in principle a result of bug fixing the latest sub version, and will be announced at release time and should be implemented without further delay.

EHF Ordering 2014-09-02 Page 10 of 48

<sup>&</sup>lt;sup>8</sup> DIFI's mal for Samhandlingsavtale (Interaction agreement template)



#### 4 DEFINITIONS

| Term                               | Description  |
|------------------------------------|--|
| EHF (Elektronisk<br>Handelsformat) | The formats to be used for the exchange of electronic documents towards the Norwegian public sector (catalogue, order, and invoice). EHF is based on BII2 and UBL 2.1.   |
| Catalogue                          | A document describing the properties of products and services.   |
| Invoice                            | The financial confirmation of a purchase. The Invoice is sent from Seller to Buyer with amount to be paid and payment instructions.  |
| Order                              | The Order is used by the Buyer to purchase goods and services.   |
| Order Response                     | An Order Response is used to accept or reject an Order on header or line level.  |
| Supplier                           | A Company delivering products or services.   |
| Seller                             | A person or unit within the Suppliers organisation being responsible for selling a product or a service to a Customer.   |
| Customer                           | A Company taking over the ownership of a product or service based on an agreement with Supplier.   |
| Buyer                              | A person or unit within the Customers organisation buying a product or service at a set price.   |
| Originator                         | A person or unit within the Customers organisation that initiates an order.  |
| UBL                                | UBL (Universal Business Language) is a collection of XML-formats (XML Schema) for the exchange of electronic documents such as Catalogue, Order and Invoice.   |
| BII2                               | BII (Business Interoperability Interfaces) is a subset of UBL containing documents and content that is required for electronic collaboration in the European public sector.  Does not include separate XML Schemas |
| Schematron validation              | Validation of a message towards business requirements. Additional to the syntax check against XML Schema.  |

EHF Ordering 2014-09-02 Page 11 of 48



## 5 ORDERING PROCESS AND BUSINESS REQUIREMENTS

This chapter describes the ordering process and functional requirements covered by EHF Order and Order Response. The description is based on the business rules described in profile CEN BII2 28 Ordering.

#### 5.1 ABOUT THE ORDER MESSAGES

The messages covered by this Implementation guide are EHF Order and EHF Order Response. Buyer and Seller must exchange both messages electronically to be in compliance with this guide.

The Order message is used to send an order from Buyer to Seller. Via the Order Response message the Seller can respond to the order as a whole or partially with suggested changes to the order. This enables the Seller and Buyer to perform the ordering process wihout unnecessary delays. Which changes to be allowed and when to send messages should be agreed in the Commercial agreement or the Collaboration agreement. See also chapter 3.6.

#### 5.2 FUNCTIONALITY AND ROLES

The Ordering process is a post-award process being performed after the Commercial agreement is signed between Supplier and Buyer.

The figure below shows the business functions and roles covered by EHF Order messages. In addition to these roles the Delivery location must be stated in the messages.

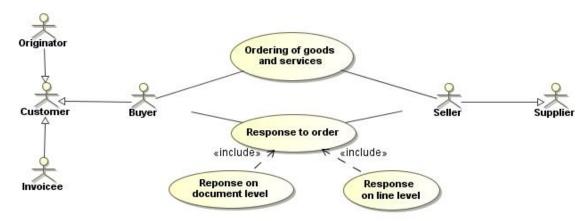


Figure 1: Functionality and roles

#### 5.3 PROFILES AND MESSAGES

The definition of a profile is given in chapter 3.5.

The profile relevant to the EHF ordering process is shown in the table below:

| Interaction process | Messages       | BII/PEPPOL<br>ProfileID | EHF<br>ProfileID |
|---------------------|----------------|-------------------------|------------------|
| Ordering process    | Order          | Bii28                   |                  |
|                     | Order response | -                       |                  |

EHF Ordering 2014-09-02 Page 12 of 48



#### 5.3.1 PROFILEID

The ProfileID identifies the process the business document is part of. EHF uses the identification system according to BII:

| Profile contents | ProfileID                              |
|------------------|--|
| Ordering process | urn:www.cenbii.eu:profile:bii28:ver2.0 |

## 5.4 ORDERING PROCESS

The Ordering process descibed in this guide is a common process in most trading businesses. We expect companies to understand this process even if they may have organised it differently.

The Ordering process is as follows:

- 1. A Buyer sends an order to a Seller specifying goods or services to be delivered. The goods or services can either be identified through article numbers or descibed as free text.
- 2. The order may refer to a Commercial agreement stating terms and regulations for the purchase. If not these terms can be specified in the order.
- 3. The Seller receives and vaildates the order message. If the message is not according to agreed format the Seller must inform the Buyer that it will not be processed.
- 4. If validation is OK the Seller processes the order and sends an order response to the Buyer with the result of the processing.
  - a. The order is accepted completely with a positive order reponse and delivery will be fulfilled according to agreed terms.
  - b. The order is accepted with changes on one or more order lines. Further processing should be described in the Collaboration agreement but could potentially lead to some manual handling.
  - c. The order is rejected completely with a negativ order response and no delivery can be expected.
- 5. When receiving a negative order response rejecting the whole order, the Buyer may initiate a new purchase taking into account the reason for the rejection.

The figure below describes the ordering process using EHF Order messages. The process is based on Profile CENBII 28 - Ordering. This profile assumes that both the Order and the Order Response is sent electronically.

EHF Ordering 2014-09-02 Page 13 of 48



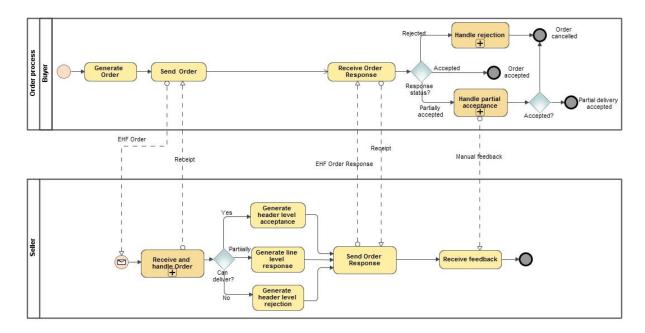


Figure 2: Ordering process

Feedback on reception of the EHF Order and EHF Order Response can be done via e-mail, Telephone or as an electronic message. The use of an electronic message is descibed in chapter 3.4 in this document.

The use of Message Level Response must be agreed between Buyer and Seller.

EHF Ordering 2014-09-02 Page 14 of 48



## 6 DESCRIPTION OF SELECTED PARTS OF THE EHF ORDER FORMATS

There are no formal requirements to order content according to Norwegian regulations. The content requirements are therefore based on the following:

- Information content in the existing Procurement Platform (EPP)
- UBL 2.1
- CEN BII2

The format will also be verified against requirements in certain areas of the Norwegian private sector.

Chapter 6.1 and 6.2 describe selected areas of the format and specifically information elements being important for use in the Norwegian market.

Part of the content of chapter 6.1 is relevant for both messages while chapter 6.2 contains information relevant only for Order Response.

Complete Information content is defined in chapter 7.

#### 6.1 ORDER

#### 6.1.1 ROLES AND ACTORS

The following roles are defined in EHF Order. These roles can either be hold by the same physical actor of by different actors depending on how the order processing is organized.

The type of Party ID that is used shall be defined in the schemeID according to code list in defined in the «Peppol Policy for use of identifiers»<sup>9</sup>. The following codes are relevant for use in Norway:

| Scheme ID | Scheme Agency                              |
|-----------|--|
| GLN       | GS1  |
| NO:ORGNR  | Enhetsregisteret ved Brønnøysundregisterne |
| NO:VAT    | Enhetsregisteret ved Brønnøysundregisterne |
| ZZZ       | Unknown issuer agency                      |

ZZZ is to be used for internal customerid's or supplierid's.

| Role                                    | Description   |
|---|---|
| Buyer (BuyerCustomerParty)              | The party buying products or services. Mandatory.       |
| Originator<br>(OriginatorCustomerParty) | The unit initiating the order. Most often the end user. |
| Invoicee<br>(AccountingCustomerParty)   | The invoice receiver can be stated in the order.        |

<sup>&</sup>lt;sup>9</sup> http://www.peppol.eu

EHF Ordering 2014-09-02 Page 15 of 48



| Seller (SellerSupplierParty) | The party receiving an order from Buyer. Mandatory. |
|------------------------------|---|
|                              |   |

Example of supplier information on header level in a EHF Order message:

```
<ac:SellerSupplierParty>
   <cac:Party>
      <cbc:EndpointID schemeID="NO:ORGNR">976502132</cbc:EndpointID>
      <cac:PartyIdentification>
         <cbc:ID schemeID="ZZZ">12345</cbc:ID>
       </cac:PartyIdentification>
       <cac:PartyName>
         <cbc:Name>WENAAS AS</cbc:Name>
       </cac:PartyName>
       <cac:PartyLegalEntity>
         <cbc:RegistrationName/>
         <cbc:CompanyID schemeID="NO:ORGNR">976502132</cbc:CompanyID>
       </cac:PartyLegalEntity>
       <cac:Contact>
         <cbc:ID>Unknown</cbc:ID>
         <cbc:Name/>
         <cbc:Telephone/>
         <cbc:ElectronicMail/>
       </cac:Contact>
    </cac:Party>
  </cac:SellerSupplierParty>
```

Example of buyer information on header level in a EHF Order message.

Be aware that Contact/ID is recommended to use. This is an extension to BII Core.

```
<cac:BuyerCustomerParty>
    <cac:Party>
      <cbc:EndpointID schemeID="NO:ORGNR">984661185</cbc:EndpointID>
      <cac:PartyIdentification>
       <cbc:ID schemeID="GLN">7080000555134</cbc:ID>
      </cac:PartyIdentification>
      <cac:PartyName>
         <cbc:Name>Posten Norge As</cbc:Name>
      </cac:PartyName>
      <cac:PostalAddress>
         <cbc:StreetName>BISKOP GUNNERUS' GATE 14</cbc:StreetName>
         <cbc:CityName>OSLO</cbc:CityName>
         <cbc:PostalZone>0185</cbc:PostalZone>
         <cac:Country>
           <cbc:IdentificationCode listID="ISO3166-1:Alpha2">NO</cbc:IdentificationCode>
         </cac:Country>
      </cac:PostalAddress>
      <cac:PartyLegalEntity>
         <cbc:CompanyID schemeID="NO:ORGNR">984661185</cbc:CompanyID>
      </cac:PartyLegalEntity>
      <cac:Contact>
         <cbc:ID>3150bdn </cbc:ID>
         <cbc:Name>Johansen, Pat</cbc:Name>
         <cbc:Telephone>91508465</cbc:Telephone>
         <cbc:ElectronicMail>pat.johansen@posten.no</cbc:ElectronicMail>
      </cac:Contact>
    </cac:Party>
  </cac:BuyerCustomerParty>
```

## 6.1.2 PRODUCT IDENTIFICATION

Product identification must be done using the identifiers described below.



- Sellers ID
- Standard ID, e.g. GTIN

Either Sellers ID or Standard ID must be sent.

Which identifier to use depends on what is known at the time of order exchange or what is commonly used in the relevant business sector.

Example of an EHF Order message using both Sellers ID and Standard ID (GTIN):

#### 6.1.3 PRODUCT NAME AND DESCRIPTION

The Product name shall be sent in tag < Item/Name > on line level. Description of a product can be sent in < Item/Description >, but is normally not used in the order.

The Product name is often sent in the order from buyer to seller. The field length should not exceed 160 characters being the maximum length sent from most existing public purchasing systems. This element is also included in the shopping basket when OCI punch-out (round trip) is used.

Example in an EHF Order message:

## 6.1.4 QUANTITIES AND UNITS

Various Quantities and Units can be stated in the EHF Order. These are both related to the ordering process and the logistics process.

The table below lists quantities and units in the format. To all quantities there must be a legal Unit according to the Code list.

| Element name / (Tag name) | Description  |
|---------------------------|--|
| Price Quantity /          | Quantity related to Price.                         |
| (BaseQuantity)            |  |
| Order Quantity /          | Quantity that is ordered, e.g. number of pieces or |
| (Quantity)                | volume in litre .                                  |

Example of an EHF Order line with a quantity of 120 litre (cbc:Quantity) and price is given per litre. (BaseQuantity):

EHF Ordering 2014-09-02 Page 17 of 48



## 6.1.5 PRICES

Prices may be exchanged in the Ordering process both for Catalogue-orders and free text orders. This also allows for the Supplier to change the price in the Order response.

If prices are not sent in the order the normal process is to do price matching during the billing process comparing prices in the Invoice to prices in the Catalogue.

Price sent in EHF Order is related to the articles or services within this order. The following price can be stated:

Net price including all allowances and charges but excluded Vat

Be aware that Gross prices cannot be sent in the format (price before discount and charges). Price must have Currency as an attribute. Currency shall be according to Code list.

Example of price information in an EHF Order message:

## 6.1.6 ATTACHMENTS

Non-XML documents can be sent as attachments to the EHF Order. This could be drawings or timesheets or other documents relevant for the order. The attachment can either be sent as a binary objetc embedded in the message or as a URI to an external address as a link.

It is recommended to send attachments as embedded, binary objetcs and not as external references.

| Element   | Description  |
|-----------|--|
| Coding    | Base64   |
| File name | File name and extension should be sent in cac:AdditionalDocumentReference/cbc:ID |

EHF Ordering 2014-09-02 Page 18 of 48



| Document format | Recommended Mine-types:  PDF – application/pdf TXT – text/txt XML – text/xml GIF – image/gif TIFF – image/tiff JPEG, JPG – image/jpeg  Use of other mime-types can be agreed  |
|-----------------|---|
| Size            | Recommended maximum message size is 5MB <u>including</u> attachments.   |
| Description     | It is recommended to use element cac:AdditionalDocumentReference/cbc:DocumentType to send a short description of the content of the attachment.  NB: Attachments should be used for additional information and not as order copies. |

Example of attachment as an embedded, binary object in an EHF Order message.

## 6.1.7 ENVIRONMENT, SOCIAL RESPONSIBILITY AND ECOLOGICAL

Public actors will have requirements related to the environment, ecologically produced food and fair trade. They will also demand that basic human rights are respected in the product production and trade.

Environmental lables defined in the Catalogue can also be sent in the Order to motivate the purchasers to follow up these requirements in their daily work.

Example of Encironmental lables in an EHF Order message:

## 6.1.8 ADDITIONAL ITEM PROPERTIES

Item properties that cannot be stated in any of the defined elements can be sent as Additional item properties. The Name of the property must be declared together with the actual Value.

Example of additional properties:

EHF Ordering 2014-09-02 Page 19 of 48



- Color
- Weight

## Example of Additional item properties in an EHF Order message:

EHF Ordering 2014-09-02 Page 20 of 48



#### 6.2 ORDER RESPONSE

Order response is a message sent from seller to buyer stating the sellers ability to fulfill the order. The following rules applies to the EHF Order Response:

- The Order response must refer to the preceding Order.
- Seller may accept or reject the entire Order.
- The Order response should contain an explanation to a rejection.
- Seller may accept or reject the separate order lines.
- If Seller accepts or rejects order lines, all order lines must be sent in the Order response.
- Lines in the Order response must refer to corresponding lines in the Order 1 to 1.
- The following information may be changes in the Order response:
  - Quantity
  - o Delivery period
  - o Replacement item
  - Price
- If the Order is rejected or changed, the Order response must contain contact information to Seller.

#### 6.2.1 RESPONSE CODE

The Response code states the Sellers ability to fulfill the order and must be sent on both header level and line level if lines are sent.

#### Rules for use:

- Response code must be sent on both Header and Line level.
- If Response code is missing the Order response will be rejected.
- Response code may have 3 values: 27=Rejected, 29=Accepted, and 30=Accepted with change/Amendment.

## Response code on Header level:

| Response code | Action  |
|---------------|---|
| 27            | The Order is rejected. No lines should be sent.             |
| 29            | The Order is accepted. No lines should be sent.             |
| 30            | The Order is accepted with changes. All lines must be sent. |

Example of Response code on Header level in an EHF Order Response message:

```
<cbc:ID>34</cbc:ID>
<cbc:IssueDate>2012-10-01</cbc:IssueDate>
<cbc:IssueTime>12:30:00</cbc:IssueTime>
<cbc:OrderResponseCode listID="UNCL1225">30</cbc:OrderResponseCode>
<cbc:Note>Changes in 2 orderlines</cbc:Note>
```

EHF Ordering 2014-09-02 Page 21 of 48



## Response code on Line level:

| Response code | Action                                      |  |  |  |  |
|---------------|---|--|--|--|--|
| 27            | The Order line is rejected.                 |  |  |  |  |
| 29            | The Order line is accepted without changes. |  |  |  |  |
| 30            | The Order line is accepted with changes.    |  |  |  |  |

Example of Response code on Line level in an EHF Order Response message:

## 6.2.2 ORDER REFERENCE

Reference to the preceding order must be done on Header level and on Line level if lines are sent.

Example of Order reference on Header level in an EHF Order Response message:

Example of Order reference on Line level in an EHF Order Response message:

## 6.2.3 ORDER RESPONSE WITH CHANGES

When Seller accepts an order with changes, the Response code «Accepted with change» must be sent on both Header and Line level.

In addition the elements to be changed must be sent with new values.

EHF Ordering 2014-09-02 Page 22 of 48



The following elements can be changed:

- Quantity
- Delivery period
- Replacement item

</cac:OrderLine>

Price

Example of changes in an EHF Order Response message:

```
<cac:OrderLine>
               <cac:LineItem>
                      <cbc:ID>1</cbc:ID>
                      <cbc:LineStatusCode listID=" UNCL1225">30</cbc:LineStatusCode>
                       <cbc:Quantity unitCode="EA"</pre>
unitCodeListID="UNECERec20">18</cbc:Quantity>
                       <cac:Item/>
               </cac:LineItem>
       </cac:OrderLine>
Example of Replacement item in an EHF Order Response message:
       <cac:OrderLine>
               <cac:LineItem>
                      <cbc:ID>2</cbc:ID>
                      <cbc:LineStatusCode listID=" UNCL1225">30</cbc:LineStatusCode>
                      <cbc:PartialDeliveryIndicator>false</cbc:PartialDeliveryIndicator>
                      <cac:Item>
                              <cbc:Description>Wet tissues for children</cbc:Description>
                              <cbc:Name>Wet tissues</cbc:Name>
                              <cac:SellersItemIdentification>
                                      <cbc:ID>SItemNo011</cbc:ID>
                              </cac:SellersItemIdentification>
                       </cac:Item>
               </cac:LineItem>
               <cac:SellerSubstitutedLineItem>
                       <cbc:ID>2</cbc:ID>
                       <cac:Item>
                              <cbc:Description>Wet tissues for adults</cbc:Description>
                              <cbc:Name>Wet tissues/cbc:Name>
                              <cac:SellersItemIdentification>
                                      <cbc:ID>SItemNo012</cbc:ID>
                              </cac:SellersItemIdentification>
                              <cac:StandardItemIdentification>
                                      <cbc:ID schemeID="GTIN">05449000035882</cbc:ID>
                              </cac:StandardItemIdentification>
                              <cac:CommodityClassification>
                                      <cbc:ItemClassificationCode</pre>
listID="UNSPSC">675634</cbc:ItemClassificationCode>
                       </cac:Item>
               </cac:SellerSubstitutedLineItem>
```

EHF Ordering 2014-09-02 Page 23 of 48



## 7 INFORMATION CONTENT

The tables in chapter 7.1 and 7.2 describe all elements of the EHF Order and Order Response formats.

The tables consist of the following columns:

<u>Name</u> contains the descriptive name of the element. Names in blue are composite elements that should be read as headers for the following lines.

**<u>Description</u>** provides supplementary information of the element and possible rules for the use of it.

**Req.** states if the element is

M = Mandatory

R = Recommended

O = Optional

Max rep. States number of repletion's for the element.

1 Element can only be repeated once.

unbounded Element can be repeated as many times as wanted

**Example** shows examples of content.

XML Element is the tag-name according to UBL.

EHF Ordering 2014-09-02 Page 24 of 48



## 7.1 ORDER INFORMATION CONTENT

| Name                            | Description  | Req. | Max rep. | Example  | XML Element                     |
|---------------------------------|--|------|----------|--|---------------------------------|
| EHF Order                       | Order format for the Norwegian market based on CEN BII   | M    |          |  | Order                           |
| —UBL Version                    | UBL version used in the message  | M    | 1        | 2.1  | cbc:UBLVersionID                |
| —Customization identifier       | Identifies the specification of content and rules that apply to the transaction.   | М    | 1        | urn:www.cenbii.eu:transaction:biitrns001:ver2.0:<br>extended:urn:www.peppol.eu:bis:peppol28a:<br>ver1.0: extended:urn:www.difi.no:ehf:ordre:<br>ver1.0 | cbc:CustomizationID             |
| —Profile identifier             | Identifies the BII profile or business process context in which the transaction appears.   | M    | 1        | urn:www.cenbii.eu:profile:bii28:ver2.0   | cbc:ProfileID                   |
| —Order identifier               | A transaction instance must have an identifier. The identifier enables referencing the transaction for various purposes such as from other transactions that are part of the same process. | М    | 1        | 01   | cbe:ID                          |
| —Order issue date               | The date on which the transaction instance was issued.   | M    | 1        | 2012-11-25   | cbc:IssueDate                   |
| —Order issue time               | The time assigned by the buyer on which the order was issued.  | 0    | 1        | 12:00  | cbc:IssueTime                   |
| —Consignment order indication   | "Indicates wether the order is a purchase order or consignement order. Default is purchase order.  | О    | 1        |  | cbc:OrderTypeCode               |
| —Document level textual note    | Free form text applying to the Order. This element may contain<br>notes or any other similar information that is not contained<br>explicitly in another structure.                         | 0    | 1        | Ekstraordre  | cbc:Note                        |
| —Currency                       | The default currency for the order.  | M    | 1        | NOK  | cbc:DocumentCurrencyCode        |
| —Buyers accounting string       | Used by the buyer to specify a reference that should be repeated in e.g. invoice to enable the buyer to automatically book e.g. to the right project, or account.                          | 0    | 1        | 112233   | cbc:AccountingCost              |
| ─_Validity Period               | Information about ValidityPeriod   | 0    | 1        |  | cac:ValidityPeriod              |
| Order validity end date         | The end date for when the order is valid. The end date for the time period within which the seller must respond.   | 0    | 1        | 2012-10-20   | cbc:EndDate                     |
| Quotation Document reference    | Information about Quotation Document reference   | 0    | 1        |  | cac:QuotationDocumentReference  |
| —Quotation document reference   | A requirement to give a unique reference to the quotation that is the base for the order.  | M    | 1        | Tilbud_123   | cbc:ID                          |
| Order Document reference        | Information about Order Document reference   | 0    | 1        |  | cac:OrderDocumentReference      |
| Order document reference        | Used to reference the initial order that was rejected and a new order is issued.   | M    | 1        | Ord_456  | cbc:ID                          |
| Originator Document reference   | Information about Originator Document reference  | 0    | 1        |  | cac:OriginatorDocumentReference |
| —Originator document reference  | A reference to Originator Document. To be able to give a reference to the internal requesition on the buyer site on which the order is based.  | М    | 1        | Dok_789  | cbc:ID                          |
| Originator document description | Originator document description.   | 0    | 1        | Forespørsel fra mai 2012   | cbc:DocumentType                |



| Name                            | Description   | Req. | Max rep.  | Example          | XML Element                          |
|---------------------------------|---|------|-----------|------------------|--------------------------------------|
| Additional Document reference   | Information about Additional Document reference   | 0    | unbounded |                  | cac:AdditionalDocumentReference      |
| —Document identifier            | An identifier for the referenced document.  | M    | 1         | Vedlegg_1        | cbc:ID                               |
| —Document description           | A short description of the document type.   | О    | 1         | Tegning          | cbc:DocumentType                     |
| Attachment                      | Information about attachment  | O    | 1         |                  | cac:Attachment                       |
| —Attached binary object         | The attached document embeded as binary object.   | 0    | 1         |                  | cbc:<br>EmbeddedDocumentBinaryObject |
| External reference              | Information about external reference/URI  | 0    | 1         |                  | cac:ExternalReference                |
| External document URI           | The Uniform Resource Identifier (URI) that identifies where the external document is located.   | М    | 1         | www.documents.no | cbc:URI                              |
| Contract                        | Information about Contract  | 0    | 1         |                  | cac:Contract                         |
| —Reference identifier           | Positive identification of the reference such as a unique identifier.   | M    | 1         | 2012_10          | cbc:ID                               |
| Reference type                  | The short description of what is reference such as contract type, document type, meter etc.  The type of Contract, expressed as text.   | 0    | 1         | Rammeavtale      | cbc:ContractType                     |
| Buyer                           | Information about Buyer   | M    | 1         |                  | cac:BuyerCustomerParty               |
| Party                           | Partyinformation  | M    | 1         |                  | cac:Party                            |
| Buyer party endpoint identifier | Identifies the end point of the routing service. Org.number in Norway.  | О    | 1         | 931186755        | cbc:EndpointID                       |
| Party Identification            | Information about PartyID   | 0    | 1         |                  | cac:PartyIdentification              |
| Buyer party identification      | An identification for the buyer party.  | M    | 1         | 12345            | cbc:ID                               |
| Buyer party name                | The name of the party who orders the listed items.  Information about Party name  | 0    | 1         | Helseforetak     | cac:PartyName                        |
| Buyer party name                | The name of the party who orders the listed items.  | M    | 1         | Helseforetak     | cbc:Name                             |
| Postal address                  | Information about Postal address  | 0    | 1         |                  | cac:PostalAddress                    |
| —Address line 1                 | The main address line in a postal address usually the street name and number.   | 0    | 1         | Sinsenveien 40   | cbc:StreetName                       |
| —Address line 2                 | An additional address line in a postal address that can be used to give further details supplementing the main line. Common use are secondary house number in a complex or in a building. | О    | 1         | 1. bygg          | cbc:AdditionalStreetName             |
| —City                           | The common name of the city where the postal address is. The name is written in full rather than as a code.   | 0    | 1         | Oslo             | cbc:CityName                         |
| Post code                       | The identifier for an addressable group of properties according to the relevant national postal service, such as a ZIP code or Post Code.   | О    | 1         | 0501             | cbc:PostalZone                       |

EHF Ordering 2014-09-02 Page 26 of 48



| ame  | Description   | Req. | Max rep. | Example                     | XML Element             |
|--|---|------|----------|-----------------------------|-------------------------|
| —Country subdivision                           | For specifying a region, county, state, province etc. within a country by using text.   | O    | 1        | Østlandet                   | cbc:CountrySubentity    |
| Land<br>Country                                | Information about Country   | 0    | 1        |                             | cac:Country             |
| Country code                                   | The country where the address is. The country should always be given by using ISO code 3166 alpha 2                               | M    | 1        | NO                          | cbc:IdentificationCode  |
| VAT number                                     | Information about VAT   | 0    | 1        |                             | cac:PartyTaxScheme      |
| —Buyer VAT identifier                          | The buyers registered Value Added Tax identifier. To be stated in case reverse charge is to apply to the purchase.                | M    | 1        | NO931186755MVA              | cbc:CompanyID           |
| Tax scheme                                     | Information about Tax scheme  | M    | 1        |                             | cac:TaxScheme           |
| —Kode  | =VAT  | M    | 1        |                             | cbc:ID                  |
| Legal entity                                   | Information about Legal entity  | O    | 1        |                             | cac:PartyLegalEntity    |
| —Buyers legal registration name                | The official name of the party as registered with the relevant fiscal authority.  | О    | 1        | Helseforetak AS             | cbc:RegistrationName    |
| —Buyers legal registration identifier          | Identifies a company as registered with the company registration scheme.  | О    | 1        | NO931186755MVA<br>931186755 | cbc:CompanyID           |
| Registration address                           | Information about Registration address  | O    | 1        |                             | cac:RegistrationAddress |
| —Buyers legal registration address city name   | Associates with the registered address of the party within a Corporate Registration Scheme. The name of a city, town, or village. | О    | 1        | Oslo                        | cbc:CityName            |
| Country  | Information about Country   | 0    | 1        |                             | cac:Country             |
| Buyers legal registration address country code | Buyers legal registration address country ID  | M    | 1        | NO                          | cbc:IdentificationCode  |
| Contact  | Contact information   | O    | 1        |                             | cac:Contact             |
| —Contact ID                                    | Customer reference ("Your ref") to be returned in the Invoice, e.g.Employee-no.   | О    | 1        | 3150bdn                     | cbc:ID                  |
| —Contact person name                           | The name of the contact person.   | О    | 1        | Ole Olsen                   | cbc:Name                |
| —Contact telephone number                      | A phone number for the contact person. If the person has a direct<br>number, this is that number.                                 | О    | 1        | 23055000                    | cbc:Telephone           |
| —Contact fax number                            | A fax number for the contact persons.   | 0    | 1        | 23055001                    | cbc:Telefax             |
| Contact email address                          | The e-mail address for the contact person. If the person has a direct e-mail this is that email.                                  | 0    | 1        | post@helseforetak.no        | cbc:ElectronicMail      |
| Seller   | Information about Seller  | M    | 1        |                             | cac:SellerSupplierParty |
| Party  | Partyinformation  | M    | 1        |                             | cac:Party               |
| —Seller party endpoint identifier              | Identifies the end point of the routing service.  | 0    | 1        | 938752655                   | cbc:EndpointID          |
| PartyIdentification                            | Information about PartyID   | 0    | 1        |                             | cac:PartyIdentification |

EHF Ordering 2014-09-02 Page 27 of 48



| ame                         | Description   | Req. | Max rep. | Example              | XML Element                |
|-----------------------------|---|------|----------|----------------------|----------------------------|
| Seller party identification | Identifies a party.   | M    | 1        | 7080000374200        | cbe:ID                     |
| Seller party name           | The name of the party.  | 0    | 1        | Medical              | cac:PartyName              |
| Party name                  | Information about Party name  |      |          |                      |                            |
| Seller party name           | The name of the party.  | M    | 1        | Medical              | cbc:Name                   |
| PostalAddress               | Information about Postal address  | 0    | 1        |                      | cac:PostalAddress          |
| —Address line 1             | The main address line in a postal address usually the street name and number.   | 0    | 1        | Rådhusgaten 10       | cbc:StreetName             |
| —Address line 2             | An additional address line in a postal address that can be used to give further details supplementing the main line. Common use are secondary house number in a complex or in a building. | 0    | 1        |                      | cbc:AdditionalStreetName   |
| —City                       | The common name of the city where the postal address is. The name is written in full rather than as a code.   | 0    | 1        | Oslo                 | cbc:CityName               |
| Post code                   | The identifier for an addressable group of properties according to the relevant national postal service, such as a ZIP code or Post Code.   | 0    | 1        | 0585                 | cbc:PostalZone             |
| —Country subdivision        | For specifying a region, county, state, province etc. within a country by using text.   | 0    | 1        |                      | cbc:CountrySubentity       |
| Country                     | Countryinformation  | 0    | 1        |                      | cac:Country                |
| Country code                | The country where the address is. The country should always be given by using ISO code 3166 alpha 2   | M    | 1        | NO                   | cbc:IdentificationCode     |
| Contact                     | Contact information   | 0    | 1        |                      | cac:Contact                |
| —Contact person name        | The name of the contact person.   | 0    | 1        | Per Persen           | cbc:Name                   |
| —Contact telephone number   | A phone number for the contact person. If the person has a direct number, this is that number.  | О    | 1        | 67915500             | cbc:Telephone              |
| —Contact fax number         | A fax number for the contact persons.   | 0    | 1        | 67915501             | cbc:Telefax                |
| Contact email address       | The e-mail address for the contact person. If the person has a direct e-mail this is that email.  | 0    | 1        | post@helseforetak.no | cbc:ElectronicMail         |
| Originator                  | Information about Originator  | 0    | 1        |                      | cac:OriginatorCustomerPart |
| Party                       | Party information   | M    | 1        |                      | cac:Party                  |
| PartyIdentification         | Information about PartyID   | 0    | 1        |                      | cac:PartyIdentification    |
| Originator identifier       | Identifies a party.   | M    | 1        | 12345                | cbc:ID                     |
| Party name                  | Information about Party name  | 0    | 1        |                      | cac:PartyName              |
| Originator name             | The name of the party.  | M    | 1        | Helseavdeling        | cbc:Name                   |
| Contact                     | Contact information   | 0    | 1        |                      | cac:Contact                |
| Contact person name         | The name of the contact person.   | О    | 1        | Per Persen           | cbc:Name                   |

EHF Ordering 2014-09-02 Page 28 of 48



| lame                          | Description   | Req. | Max rep. | Example              | XML Element                 |
|-------------------------------|---|------|----------|----------------------|-----------------------------|
| —Contact telephone number     | A phone number for the contact person. If the person has a direct number, this is that number.  | О    | 1        | 67915500             | cbc:Telephone               |
| —Contact fax number           | A fax number for the contact persons.   | О    | 1        | 67915501             | cbc:Telefax                 |
| Contact email address         | The e-mail address for the contact person. If the person has a direct e-mail this is that email.  | О    | 1        | post@helseforetak.no | cbc:ElectronicMail          |
| _Invoicee                     | Information about Invoicee  | 0    | 1        |                      | cac:AccountingCustomerParty |
| Party                         | Party information   | M    | 1        |                      | cac:Party                   |
| —EndepunktID                  | Identifies the end point of the routing service. Org.number in Norway.  | 0    | 1        |                      | cbc:EndpointID              |
| PartyIdentification           | Information about PartyID   | 0    | 1        |                      | cac:PartyIdentification     |
| Invoicee party identification | An identification for the invoicee party.   | M    | 1        |                      | cbc:ID                      |
| Party name                    | Information about Party name  | 0    | 1        |                      | cac:PartyName               |
| Invoicee party name           | The name of the party who should be invoiced for the ordered items.   | M    | 1        |                      | cbc:Name                    |
| Postal address                | Adress information  | 0    | 1        |                      | cac:PostalAddress           |
| —Address line 1               | The main address line in a postal address usually the street name and number.   | О    | 1        |                      | cbc:StreetName              |
| —Address line 2               | An additional address line in a postal address that can be used to give further details supplementing the main line. Common use are secondary house number in a complex or in a building. | О    | 1        |                      | cbc:AdditionalStreetName    |
| —City                         | The common name of the city where the postal address is. The name is written in full rather than as a code.   | О    | 1        |                      | cbc:CityName                |
| —Post code                    | The identifier for an addressable group of properties according to<br>the relevant national postal service, such as a ZIP code or Post<br>Code.   | О    | 1        |                      | cbc:PostalZone              |
| —Country subdivision          | For specifying a region, county, state, province etc. within a country by using text.   | О    | 1        |                      | cbc:CountrySubentity        |
| Country                       |   | 0    | 1        |                      | cac:Country                 |
| —Country code                 | The country where the address is. The country should always be given by using ISO code 3166 alpha 2   | M    | 1        |                      | cbc:IdentificationCode      |
| Tax scheme                    | Information regarding tax   | 0    | 1        |                      | cac:PartyTaxScheme          |
| —Company ID                   | Identifies a company as registered with the company registration scheme.  | M    | 1        |                      | cbc:CompanyID               |
|                               |   | M    | 1        |                      | cac:TaxScheme               |
| —Avgifts ID                   | =VAT  | M    | 1        |                      | cbc:ID                      |

EHF Ordering 2014-09-02 Page 29 of 48



| ame                            | Description   | Req. | Max rep. | Example          | XML Element                 |
|--------------------------------|---|------|----------|------------------|-----------------------------|
| Legel entity                   | Information regarding legal entity  | 0    | 1        |                  | cac:PartyLegalEntity        |
| —Legal registration name       | The official name of the party as registered with the relevant fiscal authority.  | 0    | 1        |                  | cbc:RegistrationName        |
| —Legal registration identifier | Identifies a company as registered with the company registration scheme.  | 0    | 1        |                  | cbc:CompanyID               |
| Juridisk adresse               |   | 0    | 1        |                  | cac:RegistrationAddress     |
| —City name                     | Associates with the registered address of the party within a Corporate Registration Scheme. The name of a city, town, or village.   | 0    | 1        |                  | cbc:CityName                |
| Land Land                      |   | 0    | 1        |                  | cac:Country                 |
| Country code                   | Invoicee legal registration address country ID  | M    | 1        |                  | cbc:IdentificationCode      |
| Contact                        | Contact information   | O    | 1        |                  | cac:Contact                 |
| Contact ID                     | Invoicee contact identification   | О    | 1        |                  | cbc:ID                      |
| Delivery                       | Delivery information  | 0    | 1        |                  | cac:Delivery                |
| Delivery location              | Information about Delivery location   | 0    | 1        |                  | cac:DeliveryLocation        |
| Address                        | Address information   | 0    | 1        |                  | cac:Address                 |
| —Delivery location ID          | An identifer for the location to where the ordered items should be delivered. E.g. GLN.   | 0    | 1        | 7080000374211    | cbc:ID                      |
| —Address line 1                | The main address line in a postal address usually the street name and number.   | 0    | 1        | Solheimsveien 10 | cbc:StreetName              |
| —Address line 2                | An additional address line in a postal address that can be used to give further details supplementing the main line. Common use are secondary house number in a complex or in a building. | О    | 1        |                  | cbc:AdditionalStreetName    |
| —City                          | The common name of the city where the postal address is. The name is written in full rather than as a code.   | О    | 1        | Lørenskog        | cbc:CityName                |
| —Post code                     | The identifier for an addressable group of properties according to<br>the relevant national postal service, such as a ZIP code or Post<br>Code.   | 0    | 1        | 1473             | cbc:PostalZone              |
| —Country subdivision           | For specifying a region, county, state, province etc. within a country by using text.   | О    | 1        |                  | cbc:CountrySubentity        |
| Country                        | Country information   | 0    | 1        |                  | cac:Country                 |
| —Country code                  | The country where the address is. The country should always be given by using ISO code 3166 alpha 2   | M    | 1        | NO               | cbc:IdentificationCode      |
| Requested Delivery period      | Information about Requested Delivery period   | 0    | 1        |                  | cac:RequestedDeliveryPeriod |
| —Period start date             | The date on which the period starts. The start dates counts as part of the period.  | 0    | 1        | 2012-10-01       | cbc:StartDate               |

EHF Ordering 2014-09-02 Page 30 of 48





| lame                          | Description   | Req. | Max rep.  | Example                    | XML Element               |
|-------------------------------|---|------|-----------|----------------------------|---------------------------|
| Period end date               | The date on which the period ends. The end date counts as part of the period.                     | 0    | 1         | 2013-01-01                 | cbc:EndDate               |
| Delivery party                | Information about Delivery party  | 0    | 1         |                            | cac:DeliveryParty         |
| PartyIdentification           | Information about PartyID   | O    | 1         |                            | cac:PartyIdentification   |
| Delivery party ID             | An identifier for the party that should deliver the ordered items.                                | M    | 1         | 7080003299288              | cbc:ID                    |
| Party name                    | Information about Party name  | O    | 1         |                            | cac:PartyName             |
| Delivery party name           | The name of the party that should handle the delivery.  | M    | 1         | Helseavdeling              | cbc:Name                  |
| Contact                       | Contact information   | O    | 1         |                            | cac:Contact               |
| —Contact person name          | The name of the contact person.   | О    | 1         | Ole Olsen                  | cbc:Name                  |
| —Contact telephone number     | A phone number for the contact person. If the person has a direct<br>number, this is that number. | О    | 1         | 987098709                  | cbc:Telephone             |
| —Contact fax number           | A fax number for the contact persons.   | О    | 1         |                            | cbc:Telefax               |
| Contact email address         | The e-mail address for the contact person. If the person has a direct e-mail this is that email.  | О    | 1         | ole@helseforetak.no        | cbc:ElectronicMail        |
| Delivery terms                | Information about Delivery terms  | O    | 1         |                            | cac:DeliveryTerms         |
| —Delivery terms               | The ability for the buyer to specify what shipping terms should apply the delivery of the order.  | О    | 1         | Fritt levert til kunde     | cbc:ID                    |
| —Delivery special terms       | A description of special conditions relating to the Delivery Terms.                               | О    | 1         |                            | cbc:SpecialTerms          |
| Delivery location             | Information about Delivery location   | O    | 1         |                            | cac:DeliveryLocation      |
| —Delivery terms location      | An association to Location, e.g., a port. The unique identifier for the location.                 | О    | 1         | 7080003299299              | cbc:ID                    |
| Payment terms                 | Description of payment terms  | O    | 1         |                            | cac:PaymentTerms          |
| Payment terms                 | Description of the payment terms for the invoice which will be based on this order                | О    | 1         |                            | cbc:Note                  |
| Allowances and charges        | Information about Allowances and charges  | 0    | unbounded |                            | cac:AllowanceCharge       |
| —Tilleggsindikator            | Settes til true dersom tillegg  | M    | 1         |                            | cbc:ChargeIndicator       |
| —Allowance and charges reason | A textual reason for the allowance or the charge. Can also be its name.                           | M    | 1         | Total order value discount | cbc:AllowanceChargeReason |
| Allowance and charge amount   | The net amount of the allowance or the charge exluding VAT.                                       | M    | 1         | 20                         | cbc:Amount                |
| −Vat total                    | Information about VAT total   | O    | 1         |                            | cac:TaxTotal              |

EHF Ordering 2014-09-02 Page 31 of 48



| ame                                  | Description   | Req. | Max rep.  | Example                     | XML Element                  |
|--------------------------------------|---|------|-----------|-----------------------------|------------------------------|
| └─VAT total amount                   | The total VAT amount that is "added to the document total w/o VAT". This is the sum of all VAT subcategory amounts.  An association to the total tax amount of the Order (as calculated by the Buyer). The expected Tax Total in the corresponding invoice The total tax amount for particular tax scheme e.g. VAT; the sum of each of the tax subtotals for each tax category within the tax scheme. Sum of line tax amounts. An association to the total tax amount of the Order (as calculated by the Buyer). The expected Tax Total in the corresponding invoice. | M    | 1         | 20                          | cbc:TaxAmount                |
| -Expected totals                     | Information about expected totals   | 0    | 1         |                             | cac:AnticipatedMonetaryTotal |
| —Sum of line amounts                 | Sum of line amounts in the document.  The total of Line Extension Amounts net of tax and settlement discounts, but inclusive of any applicable rounding amount.   | M    | 1         | 120                         | cbc:LineExtensionAmount      |
| —Document total without VAT          | The "Sum of line amounts" plus "sum of allowances on document level" plus "sum of charges on document level".   | 0    | 1         | 100                         | cbc:TaxExclusiveAmount       |
| —Document total including VAT        | The total value including VAT   | О    | 1         | 100                         | cbc:TaxInclusiveAmount       |
| —Sum of allowances on document level | Sum of all allowances on header level in the document.  Allowances on line level are included in the line amount and summed up into the "sum of line amounts"   | 0    | 1         | 20                          | cbc:AllowanceTotalAmount     |
| —Sum of charges on document level    | Sum of all charge on header level in the document. Charges on line level are included in the line amount and summed up into the "sum of line amounts"   | 0    | 1         |                             | cbc:ChargeTotalAmount        |
| —Paid amounts                        | Any amounts that have been paid a-priory.   | 0    | 1         |                             | cbc:PrepaidAmount            |
| Rounding of document total           | Any rounding of the "Document total including VAT"  | 0    | 1         |                             | cbc:PayableRoundingAmount    |
| —Amount for payment                  | The amount that is expected to be paid based on the document.  This amount is the "Document total including VAT" less the "paid amounts" that have been paid a-priori.  The total amount to be paid. Estimated total amount of order including VAT  | М    | 1         | 120                         | cbc:PayableAmount            |
| -Order line                          | Order line information  | M    | unbounded |                             | cac:OrderLine                |
| Order line note                      | Free-form text applying to the Order Line. This element may contain notes or any other similar information that is not contained explicitly in another structure. Is to capture any free form description related to the order line as a whole.   | О    | 1         | Freetext note on line level | cbc:Note                     |
| Line item information                |   | M    | 1         |                             | cac:LineItem                 |
| —Document line identifier            | Identifies the Line Item assigned by the buyer.   | M    | 1         | 1                           | cbe:ID                       |
| —Ordered quantity                    | The quantity of Items for the Line Item. The quantity for the order line.   | M    | 1         | 1                           | cbc:Quantity                 |

EHF Ordering 2014-09-02 Page 32 of 48



| me                                  | Description  | Req. | Max rep. | Example      | XML Element                  |
|-------------------------------------|--|------|----------|--------------|------------------------------|
| —Order line amount                  | The total amount for the Line Item, including Allowance Charges<br>but net of taxes. The expected line amount excluding VAT but<br>inclusive of other charges, allowances and taxes.   | 0    | 1        | 100          | cbc:LineExtensionAmount      |
| —Order line tax amount              | The total tax amount for the Line Item. The total amounts of taxes on the line.  | 0    | 1        | 20           | cbc:TotalTaxAmount           |
| —Partial Delivery Allowed Indicator | Indicates if the line items must be delivered in a single shipment. Default that partial delivery is allowed.  | 0    | 1        | false        | cbc:PartialDeliveryIndicator |
| —Buyers accounting string           | The buyer's accounting information applied to the Line Item, expressed as text.  | 0    | 1        | ProjectID123 | cbc:AccountingCost           |
| Delivery                            | Delivery information   | O    | 1        |              | cac:Delivery                 |
| Requested Delivery period           | Information about Requested Delivery period  | 0    | 1        |              | cac:RequestedDeliveryPeriod  |
| —Period start date                  | The date on which the period starts. The start dates counts as part of the period.   | 0    | 1        | 2012-10-01   | cbc:StartDate                |
| Period end date                     | The date on which the period ends. The end date counts as part of the period.  | 0    | 1        | 2013-01-01   | cbc:EndDate                  |
| Originator                          | Information about Originator   | 0    | 1        |              | cac:OriginatorParty          |
| PartyIdentification                 | Information about PartyID  | 0    | 1        |              | cac:PartyIdentification      |
| Order line originator party ID      | The party who originated Order.  | M    | 1        | 123456789    | cbe:ID                       |
| Party name                          | Information about Party name   | 0    | 1        |              | cac:PartyName                |
| Order line originator party name    | The party who originated Order.  | M    | 1        |              | cbc:Name                     |
| —Price                              | Price information  | 0    | 1        |              | cac:Price                    |
| —litem price                        | The net price of an item including discounts or surcharges that apply to the price.  Although price is an optional element in an order it recommended as best practice to either state the price or provide reference to an appropriate source from which the price can be identified such as a contract, catalogue or a quote The price amount. The net price of the item including all allowances, charges and taxes but exluding VAT. | M    | 1        | 100          | cbc:PriceAmount              |
| —Item price base quantity           | The actual quantity to which the price applies.  | 0    | 1        | 1            | cbc:BaseQuantity             |
| Allowance charge                    | Information regarding allowances and charges connected to price  | 0    | 1        |              | cac:AllowanceCharge          |
| —Tilleggsindikator                  | Settes til true dersom tillegg   |      | 1        |              | cbc:ChargeIndicator          |
| —Amount                             | The total discount subtracted from the gross price to reach the net price.   | M    | 1        |              | cbc:Amount                   |
| Litem list price                    | The gross price of the item before subtracting discounts. E.g. list price.   | 0    | 1        | 105          | cbc:BaseAmount               |
| L_Item                              | Item information   | M    | 1        |              | cac:Item                     |

EHF Ordering 2014-09-02 Page 33 of 48





| ne                            | Description   | Req. | Max rep.  | Example                  | XML Element                                  |
|-------------------------------|---|------|-----------|--------------------------|--|
| —Item description as text     | Free-form field that can be used to give a text description of the item. A detailed description of the item. Use one description per language.  Test text for capturing notes | О    | 1         | Wet tissues for children | cbc:Description                              |
| —Item name                    | A short name for an item.  A short name optionally given to an item, such as a name from a Catalogue, as distinct from a description.   | 0    | 1         | Wet tissues              | cbe:Name                                     |
| Sellers Item identification   | Information about Sellers ItemID  | 0    | 1         |                          | cac:SellersItemIdentification                |
| Litem sellers identifier      | The sellers identifier for the item.  Associates the item with its identification according to the seller's system. The sellers ID for the item.                              | М    | 1         | 11111                    | cbe:ID                                       |
| Standard Item identification  | Information about Standard ItemID   | 0    | 1         |                          | cac:StandardItemIdentification               |
| Item standard identifier      | A item identifier based on a registered schema.  Associates the item with its identification according to a standard system. Standarized ID for the item                      | М    | 1         | 05704368876486           | cbc:ID                                       |
| Item specification            | Reference to a document containing item specifications  | 0    | unbounded |                          | cac:<br>ItemSpecificationDocumentRefer<br>ce |
| Document reference            | Reference to an external document (ID) when it is necessary to specify the details of the item.   | M    | 1         |                          | cbc:ID                                       |
| Product classification        | Information about Product classification  | 0    | unbounded |                          | cac:CommodityClassification                  |
| Item commodity classification | A classification code for classifying the item by its type or nature.   | М    | 1         | 12345678                 | cbc:ItemClassificationCode                   |
| —_VAT                         | Information about VAT   | 0    | 1         |                          | cac:ClassifiedTaxCategory                    |
| —Item VAT category code       | The VAT code that indicates what VAT details apply to the item  | M    | 1         | S                        | cbc:ID                                       |
| —Item VAT rate                | The VAT percentage rate that applies to the ordered item.   | О    | 1         | 25                       | cbc:Percent                                  |
| Tax scheme                    | Information about Tax scheme (VAT)  | M    | 1         |                          | cac:TaxScheme                                |
| Avgifts ID                    | =VAT  | M    | 1         |                          | cbc:ID                                       |
| Additional Item property      | Information about Additional Item properties  | 0    | unbounded |                          | cac:AdditionalItemProperty                   |
| —Name                         | The name of the information.  | M    | 1         | Weight                   | cbc:Name                                     |
| —Value                        | The value of the information.   | M    | 1         | 100 g                    | cbc:Value                                    |
| —Quantity                     | Quantity for the property   | 0    | 1         |                          | cbc:ValueQuantity                            |
| —Qualification of qty         | Description of quantity   | О    | 1         |                          | cbc:ValueQualifier                           |

EHF Ordering 2014-09-02 Page 34 of 48



## 7.2 ORDER RESPONSE INFORMATION CONTENT

| lame                              | Description   | Req. | Max rep.  | Example  | XML Element              |
|-----------------------------------|---|------|-----------|--|--------------------------|
| EHF Order response                | Norwegian implementation of the CEN BII Order respons   |      |           |  | OrderResponse            |
| —UBL VersionID                    | UBL Version the message is based on   | M    | 1         | 2.1  | cbc:UBLVersionID         |
| —Customization identifier         | Identifies the specification of content and rules that apply to the transaction.  | М    | 1         | urn:www.cenbii.eu:transaction:biitrns076:ver2.<br>0:extended:urn:www.peppol.eu:bis:peppol28a:<br>ver1.0:extended:urn:www.difi.no:ehf:<br>ordrebekreftelse:ver1.0 | cbc:CustomizationID      |
| —Profile identifier               | Identifies the BII profile or business process context in which the transaction appears.  | M    | 1         | urn:www.cenbii.eu:profile:bii28:ver2.0   | cbc:ProfileID            |
| —Order response identifier        | A transaction instance must have an identifier. The identifier enables referencing the transaction for various purposes such as from other transactions that are part of the same process.  | M    | 1         | 12   | cbe:ID                   |
| —Order response issue date        | The date on which the transaction instance was issued.  | M    | 1         | 2012-10-01   | cbc:IssueDate            |
| —Order response issue time        | The time assigned by the buyer on which the transaction was issued.   | О    | 1         | 12:00  | cbc:IssueTime            |
| —Response code                    | A code that indicates whether the referenced order as whole is Accepted or Rejected or, alternatively, Accepted with change. If response code is Accept or Reject there may not be any response lines.  Valid codes are: 29 (Accepted), 27 (Rejected) and 30 (Accepted with change) | М    | 1         | 30   | cbc:OrderResponseCode    |
| —Response clarification           | Clarifacation of the suppliers decision.  | О    | 1         | Endring på 2 linjer  | cbc:Note                 |
| —Document currency                | The default currency for the offer.   | M    | 1         | NOK  | cbc:DocumentCurrencyCode |
| -OrderReference                   | Order reference information   | M    | 1         |  | cac:OrderReference       |
| Order document reference          | Used to reference the order that is being responded to.   | M    | 1         | 24   | cbc:ID                   |
| Seller                            | Information about Seller  | M    | 1         |  | cac:SellerSupplierParty  |
| Party                             | Party information   | 0    | 1         |  | cac:Party                |
| —Seller party endpoint identifier | Identifies the end point of the routing service, Org.number in Norway.  | R    | 1         | 938752655  | cbc:EndpointID           |
| Party Identification              | Information about PartyID   | 0    | unbounded |  | cac:PartyIdentification  |
| Seller party identification       | Identifies a party.   | О    | 1         | 7080000374200  | cbc:ID                   |
| Party name                        | Information about Party name  | O    | 1         |  | cac:PartyName            |
| Seller party name                 | The name of the party.  | О    | 1         | Medical  | cbc:Name                 |
| Contact                           | Contact information for Seller  | 0    | 1         |  | cac:Contact              |
| —Contact person name              | The name of the contact person.   | О    | 1         | Nils Nilsen  | cbc:Name                 |
| —Contact telephone number         | A phone number for the contact person. If the person has a direct number, this is that number.  | О    | 1         | 22150510   | cbc:Telephone            |





| ame                              | Description  | Req. | Max rep.  | Example                | XML Element                |
|----------------------------------|--|------|-----------|------------------------|----------------------------|
| —Contact fax number              | A fax number for the contact persons.  | О    | 1         | 22150511               | cbc:Telefax                |
| Contact email address            | The e-mail address for the contact person. If the person has a direct e-mail this is that email.   | О    | 1         | nils.nilsen@medical.no | cbc:ElectronicMail         |
| -Buyer                           | Information about Buyer  | M    | 1         |                        | cac:BuyerCustomerParty     |
| Party                            | Party information  | 0    | 1         |                        | cac:Party                  |
| —Buyer party endpoint identifier | Identifies the end point of the routing service.   | R    | 1         | 931186755              | cbc:EndpointID             |
| PartyIdentification              | Information about PartyID  | 0    | unbounded |                        | cac:PartyIdentification    |
| Buyer party identification       | An identification for the buyer party.   | О    | 1         | 12345                  | cbc:ID                     |
| Party name                       | Information about Party name   | 0    | 1         |                        | cac:PartyName              |
| Buyer party name                 | The name of the party who ordered the items and receives the response.   | О    | 1         | Helseforetak A         | cbc:Name                   |
| Contact                          | Contact information  | 0    | 1         |                        | cac:Contact                |
| Contact ID                       | Contact identifier for buyer contact person  | О    | 1         |                        | cbc:ID                     |
| Delivery                         | Delivery information   | 0    | 1         |                        | cac:Delivery               |
| Promised Delivery period         | Information about Promised Delivery period   | M    | 1         |                        | cac:PromisedDeliveryPeriod |
| —Period start date               | The date on which the period starts. The start dates counts as part of the period.   | О    | 1         | 2013-04-01             | cbc:StartDate              |
| Period end date                  | The date on which the period ends. The end date counts as part of the period.  | О    | 1         | 2013-04-05             | cbc:EndDate                |
| Order line                       | Order lines are only sent if Action code on header level is<br>Accepted with change  | O    | unbounded |                        | cac:OrderLine              |
| Line item                        | Line item information  | M    | 1         |                        | cac:LineItem               |
| —Document line identifier        | Identifies the response line.  | M    | 1         | 1                      | cbc:ID                     |
| Response clarification           | Clarifacation of the suppliers decision for the line.  | О    | 1         | Utsolgt 2 artikler     | cbc:Note                   |
| —Response code                   | A code that indicates whether the referenced order line as whole is Accepted or Rejected or, alternatively, Accepted with change. Valid codes are: 29 (Accepted), 27(Rejected), 30(Accepted with change) |      | 1         | 29                     | cbc:LineStatusCode         |
| —Quantity                        | The quantity of items that will be delivered.  | О    | 1         | 20                     | cbc:Quantity               |
| — Delivery                       | Delivery information   | 0    | 1         |                        | cac:Delivery               |
| Promised Delivery period         | Information about Promised Delivery period   | M    | 1         |                        | cac:PromisedDeliveryPeriod |
| —Period start date               | The date on which the period starts. The start dates counts as part of the period.   | О    | 1         | 2012-10-20             | cbc:StartDate              |
| Period end date                  | The date on which the period ends. The end date counts as part of the period.  | О    | 1         | 2012-11-01             | cbc:EndDate                |

 EHF Ordering
 2014-09-02
 Page 36 of 48



| ame                            | Description  | Req. | Max rep.  | Example                  | XML Element                    |
|--------------------------------|--|------|-----------|--------------------------|--------------------------------|
| <del>  </del> Price            | Price information  | 0    | 1         |                          | cac:Price                      |
| —litem price                   | The net price of an item including discounts or surcharges that apply to the price.  Although price is an optional element in an offer it recommended as best practice to either state the price or provide reference to an appropriate source from which the price can be identified such as a contract, catalogue or a quote The price amount. The net price of the item including all allowances, charges and taxes but exluding VAT. | О    | 1         | 10                       | cbc:PriceAmount                |
| Item price base quantity       | The actual quantity to which the price applies.  | 0    | 1         | 1                        | cbc:BaseQuantity               |
| Item                           | Item information   | M    | 1         | 1                        | cac:Item                       |
| —Item name                     | A short name optionally given to an item, such as a name from a Catalogue, as distinct from a description. A short name for the item.  | О    | 1         | Wet tissues for children | cbc:Name                       |
| Sellers Item Identification    | Information about Sellers ItemID   | 0    | 1         |                          | cac:SellersItemIdentification  |
| Item sellers identifier        | Associates the item with its identification according to the seller's system. The sellers ID for the item.   | О    | 1         | SItemNo011               | cbc:ID                         |
| Standard Item identification   | Information about Standard ItemID  | O    | 1         |                          | cac:StandardItemIdentification |
| Item standard identifier       | Associates the item with its identification according to a standard system. Standarized ID for the item  | О    | 1         | 05704368124358           | cbe:ID                         |
| Substituted Line item          | Information about Substituted Line item  | 0    | 1         |                          | cac:SellerSubstitutedLineItem  |
| —Substituted Line Item ID      | Identifier for Seller Substituted Line Item  | M    | 1         | 1                        | cbc:ID                         |
| Item                           | Item information   | M    | 1         |                          | cac:Item                       |
| —Item name                     | A short name optionally given to an item, such as a name from a<br>Catalogue, as distinct from a description. A short name for the<br>item.  | О    | 1         | Wet tissues for adults   | cbc:Name                       |
| Sellers Item identification    | Information about Sellers ItemID   | 0    | 1         |                          | cac:SellersItemIdentification  |
| Item sellers identifier        | Associates the item with its identification according to the seller's system. The sellers ID for the item.   | О    | 1         | SItemNo012               | cbc:ID                         |
| Standard Item identification   | Information about Standard ItemID  | 0    | 1         |                          | cac:StandardItemIdentification |
| Item standard identifier       | Associates the item with its identification according to a standard system. Standarized ID for the item  | О    | 1         | 05704368876486           | cbe:ID                         |
| Product Classification         | Information about Product Classification   | 0    | unbounded |                          | cac:CommodityClassification    |
| Litem commodity classification | A classification code for classifying the item by its type or nature.  | О    | 1         | 675634                   | cbc:ItemClassificationCode     |
| Vat category                   | Information about Vat category   | 0    | 1         |                          | cac:ClassifiedTaxCategory      |

EHF Ordering 2014-09-02 Page 37 of 48





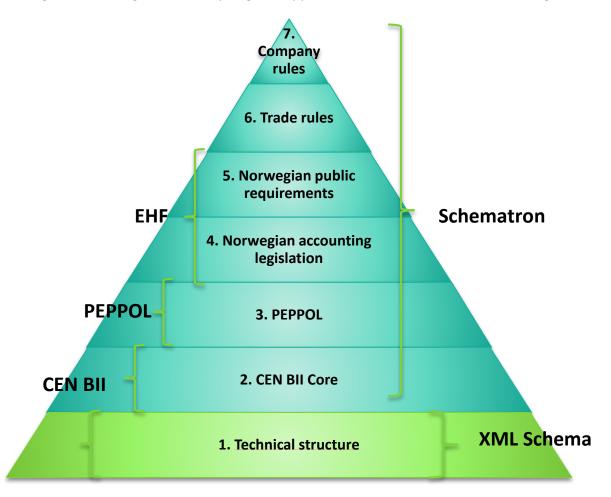
| ame                      | Description   | Req. | Max rep.  | Example | XML Element                |
|--------------------------|---|------|-----------|---------|----------------------------|
| —Item VAT category code  | The VAT code that indicates what VAT details apply to the item  | . О  | 1         | S       | cbc:ID                     |
| —Item VAT rate           | The VAT percentage rate that applies item, unless exemption reasons apply.  | О    | 1         | 25      | cbc:Percent                |
| Tax scheme               | Information about Tax scheme (VAT)  | M    | 1         |         | cac:TaxScheme              |
| Tax Scheme               | =VAT  | 1    | 1         |         | cbc:ID                     |
| Additional Item property | Information about Additional Item properties for<br>substitution item   | 0    | unbounded |         | cac:AdditionalItemProperty |
| —Name                    | The name of the information. The name of the item property.   | M    | 1         | Color   | cbc:Name                   |
| —Value                   | The value of the information. The item property value.  | М    | 1         | White   | cbc:Value                  |
| —Quantity                | Quantity for the property   | О    | 1         |         | cbc:ValueQuantity          |
| —Qualification of qty    | Description of quantity   | О    | 1         |         | cbc:ValueQualifier         |
| Order Line reference     | Information about Order Line reference  | M    | 1         |         | cac:OrderLineReference     |
| Order line reference     | Used to reference the initial order line that correspondes to the response.  Each order line may only be referenced once. All order lines should be stated. | М    | 1         | I       | cbc:LineID                 |

EHF Ordering 2014-09-02 Page 38 of 48



### 8 VALIDATION

To optimize the flexibility in the validation process, each EHF document is validated in different stages with shifting focus in every stage. The pyramid below illustrates the different stages.



# 8.1 VALIDATION PRINCIPLES

Stages in the validation process:

- 1. Validation of syntax against UBL 2.1 Schema, for example:
  - Tag names and attributes must be correctly written and follow the UBL 2.1 sequence
  - All UBL 2.1 mandatory tag names must be present.
  - The element's contents must be according to the element's type definition.
- 2. Validation against CEN BII Core to verify that the message is according to international requirements, like:
  - Valid codes for currencies, countries, tax etc.
  - Mandatory tag names according to CEN BII Core.
  - Logical correlations between information element, i.e. that start date is at least lower than end date, sub totals must be totaled, multiplications give the correct result etc.
- 3. Validation against PEPPOL (EU) rules and regulations

EHF Ordering 2014-09-02 Page 39 of 48



- 4. Validation against Norwegian accounting legislation, like:
  - Organisation number must be specified for the seller/supplier.
- 5. Validation against Norwegian public requirements, like:
  - «Your ref» must be specified.
  - Addresses, postal zone number and post office/city must be specified for the buyer/customer.

Validation stage 6 and 7 is decided upon by the trading parties if deemed necessary.

### 8.2 DYNAMIC VALIDATION

The combination of ProfileID and CustomizationID in an XML document defines the validation rules applied to the document.

CustomizationID may be extended with more elements for specific trade or business validation rules.

EHF Ordering 2014-09-02 Page 40 of 48



## 8.3 VALIDATION RULES PER PROFILEID AND CUSTOMIZATIONID

The table below shows the validation rules for ProfileID and CustomizationID. The specific validation rules are described in Chapter 8.4. ProfileID BII28, order and Order response

| Document          | Norwegian receiver | Norwegian sender | Profile ID                             | Customization ID   | Validation rules  |
|-------------------|--------------------|------------------|--|--|---|
| Order             | Yes                | Yes              | urn:www.cenbii.eu:profile:bii28:ver2.0 | urn:www.cenbii.eu:transaction:biitrns001:ver2.0:<br>extended:urn:www.peppol.eu:bis:peppol28a:ver1.0:<br>extended:urn:www.difi.no:ehf:ordre:ver1.0            | Validation against UBL 2.1 Order Schema and BII and Norwegian business rules                |
| Order             | Yes                | No               | urn:www.cenbii.eu:profile:bii28:ver2.0 | urn:www.cenbii.eu:transaction:biitrns001:ver2.0: extended:urn:www.peppol.eu:bis:peppol28a:ver1.0   | Validation against UBL 2.1 Order Schema and BII and Peppol business rules                   |
| Order             | No                 | Yes              | urn:www.cenbii.eu:profile:bii28:ver2.0 | urn:www.cenbii.eu:transaction:biitrns001:ver2.0: extended:urn:www.peppol.eu:bis:peppol28a:ver1.0   | Validation against UBL 2.1 Order Schema and BII and Peppol business rules                   |
| Order<br>Response | Yes                | Yes              | urn:www.cenbii.eu:profile:bii28:ver2.0 | urn:www.cenbii.eu:transaction:biitrns076:ver2.0:<br>extended:urn:www.peppol.eu:bis:peppol28a:ver1.0:<br>extended:urn:www.difi.no:ehf:ordrebekreftelse:ver1.0 | Validation against UBL 2.1 Order Response<br>Schema and BII and Norwegian business<br>rules |
| Order<br>Response | Yes                | No               | urn:www.cenbii.eu:profile:bii28:ver2.0 | urn:www.cenbii.eu:transaction:biitrns076:ver2.0:<br>extended:urn:www.peppol.eu:bis:peppol28a:ver1.0  | Validation against UBL 2.1 Order<br>Response Schema and BII and Peppol<br>business rules    |
| Order<br>Response | No                 | Yes              | urn:www.cenbii.eu:profile:bii28:ver2.0 | urn:www.cenbii.eu:transaction:biitrns076:ver2.0:<br>extended:urn:www.peppol.eu:bis:peppol28a:ver1.0  | Validation against UBL 2.1 Order<br>Response Schema and BII and Peppol<br>business rules    |

EHF Ordering 2014-09-02 Page 41 of 48



## 8.4 VALIDATION RULES

The 2 tables below show the validation rules that apply to the Order and Order Response.

Description of the table columns:

• Element The data element that the rule applies to.

• Rule Business rule description.

Message Each rule has its own message.

• E/W Severity. F= Fatal, the document is rejected. W=Warning, the document should be passed on.

• RuleID Identification of validation stage:

BII → CEN BII

EU → PEPPOL

OP → Rules related to PEPPOL code lists

• NOGOV & EHF → Norwegian public requirements

### 8.4.1 ORDER

| Name                    | Element (xPath)                  | Error message   | F/W | Rule ID         |  |  |  |  |
|-------------------------|----------------------------------|---|-----|-----------------|--|--|--|--|
| Profile and transaction | Profile and transaction          |   |     |                 |  |  |  |  |
| Customization           | Order/cbc:CustomizationID        | An order MUST have a customization identifier                   | F   | BII2-T01-R001   |  |  |  |  |
| identifier              |                                  |   |     |                 |  |  |  |  |
| Profile identifier      | Order/cbc:ProfileID              | An order MUST have a profile identifier                         | F   | BII2-T01-R002   |  |  |  |  |
| Profile identifier      | Order/cbc:ProfileID              | An order response must only be used in profile 28               | F   | EHFPROFILE-T76- |  |  |  |  |
|                         |                                  |   |     | R001            |  |  |  |  |
| Document level          |                                  |   |     |                 |  |  |  |  |
| Issue date              | Order/cbc:IssueDate              | An order MUST have a document issue date                        | F   | BII2-T01-R004   |  |  |  |  |
| Validity end date       | Order/cac:ValidityPeriod/cbc:End | An order SHOULD provide information about its validity end date | W   | BII2-T01-R005   |  |  |  |  |
|                         | Date                             |   |     |                 |  |  |  |  |
| Order identifier        | Order/cbc:ID                     | An order MUST have a document identifier                        | F   | BII2-T01-R006   |  |  |  |  |
| Allowance and charge    | Order/cac:AllowanceCharge/cbc:   | Allowances and charges MUST have a reason                       | F   | BII2-T01-R007   |  |  |  |  |
|                         | AllowanceChargeReason            |   |     |                 |  |  |  |  |
| Currency                | Order/cbc:DocumentCurrencyCo     | An order MUST be stated in a single currency                    | F   | BII2-T01-R009   |  |  |  |  |
|                         | de                               |   |     |                 |  |  |  |  |



| Name                                | Element (xPath)  | Error message  | F/W      | Rule ID                       |
|-------------------------------------|--|--|----------|-------------------------------|
| Currency                            | Order/cbc:DocumentCurrencyCo<br>de/@listID                   | A document currency code MUST have a list identifier attribute "ISO4217" and the currency code MUST be according to the code list.   | F        | EUGEN-T01-R014<br>OP-T01-R002 |
| Order type                          | Order/cbc:OrderTypeCode/@listI<br>D                          | An order type code MUST have a list identifier attribute "UNCL1001" and the order type MUST be according to the code list.   | F        | EUGEN-T01-R013<br>OP-T01-R001 |
| Expected totals                     |  |  |          |                               |
| Total amount for payment            | Order/cac:AnticipatedMonetaryT otal/cbc:PayableAmount        | Expected total amount for payment MUST NOT be negative.  | F        | BII2-T01-R012                 |
| Total amount for payment            | Order/cac:AnticipatedMonetaryT otal/cbc:PayableAmount        | Expected total amount for payment MUST be equal to the sum of line amounts minus sum of allowances at document level plus sum of charges at document level and VAT total amount. | F        | BII2-T01-R017                 |
| Sum of line amounts                 | Order/cac:AnticipatedMonetaryT otal/cbc:LineExtensionAmount  | Expected total sum of line amounts MUST NOT be negative.   | F        | BII2-T01-R013                 |
| Sum of line amounts                 | Order/cac:AnticipatedMonetaryT otal/cbc:LineExtensionAmount  | Expected total sum of line amounts MUST equal the sum of the order line amounts at order line level.   | F        | BII2-T01-R014                 |
| Sum of allowances on document level | Order/cac:AnticipatedMonetaryT otal/cbc:AllowanceTotalAmount | Expected total sum of allowance at document level MUST be equal to the sum of allowance amounts at document level.   | F        | BII2-T01-R015                 |
| Sum of charges on document level    | Order/cac:AnticipatedMonetaryT otal/cbc:ChargeTotalAmount    | Expected total sum of charges at document level MUST be equal to the sum of charges at document level.   | F        | BII2-T01-R016                 |
| VAT totals                          |  |  | <u> </u> |                               |
| VAT total amount                    | Order/cac:TaxTotal/cbc:TaxAmou<br>nt                         | VAT total amount SHOULD be the sum of order line tax amounts, if order line tax amounts are provided   | F        | BII2-T01-R018                 |
| Party information                   |  |  |          |                               |

EHF Ordering 2014-09-02 Page 43 of 48



| Name                        | Element (xPath)  | Error message  | F/W | Rule ID        |
|-----------------------------|--|--|-----|----------------|
| Buyer's name or identifier  | Order/cac:BuyerCustomerParty/c<br>ac:Party/cac:PartyName/cbc:Nam<br>e  | An order MUST have the buyer party name or a buyer party identifier  | F   | BII2-T01-R021  |
|                             | Order/cac:BuyerCustomerParty/c<br>ac:Party/cac:PartyIdentification/c<br>bc:ID  |  |     |                |
| Seller's name or identifier | Order/cac:SellerSupplierParty/cac<br>:Party/cac:PartyName/cbc:Name<br>Order/cac:SellerSupplierParty/cac<br>:Party/cac:PartyIdentification/cbc<br>:ID | An order MUST have the seller party name or a seller party identifier  | F   | BII2-T01-R022  |
| Endpoint id                 | //cbc:EndpointID/@schemeID   | An endpoint identifier MUST have a scheme identifier attribute.  | F   | EUGEN-T01-R011 |
| Endpoint id                 | //cbc:EndpointID/@schemeID   | An Enpoint Identifier Scheme identifier MUST be from the list of PEPPOL Party Identifiers described in the "PEPPOL Policy for using Identifiers" | F   | OP-T01-R004    |
| Party identification        | //cac:PartyIdentification/cbc:ID/<br>@schemeID   | A party identifier MUST have a scheme identifier attribute   | F   | EUGEN-T01-R012 |
| Party identification        | //cac:PartyIdentification/cbc:ID/<br>@schemeID   | An Party Identifier Scheme identifier MUST be from the list of PEPPOL Party Identifiers described in the "PEPPOL Policy for using Identifiers"   | F   | OP-T01-R005    |
|                             |  | Customer reference SHOULD have a value.  | W   | NOGOV-T01-R001 |
| Order line                  |  |  |     |                |
| Order line identifier       | Order/cac:OrderLine/cac:LineIte m/cbc:ID   | Each order line MUST have a document line identifier that is unique within the order   | F   | BII2-T01-R003  |
| Ordered quantity            | Order/cac:OrderLine/cac:LineIte m/cbc:Quantity   | Each order line ordered quantity MUST not be negative  | F   | BII2-T01-R010  |
| Ordered quantity            | Order/cac:OrderLine/cac:LineIte m/cbc:Quantity   | Each order line SHOULD have an ordered quantity  | W   | BII2-T01-R029  |

EHF Ordering 2014-09-02 Page 44 of 48



| Name                        | Element (xPath)  | Error message  | F/W | Rule ID                       |
|-----------------------------|--|--|-----|-------------------------------|
| Unit of quantity            | Order/cac:OrderLine/cac:LineIte m/cbc:Quantity/@unitCode Order/cac:OrderLine/cac:LineIte m/cbc:Quantity/@unitCodeListID  | A unit code attribute MUST have a unit code list identifier attribute "UNECERec20" and the unit code MUST be according to the code list. | F   | EUGEN-T01-R016<br>OP-T01-R009 |
| Unit of quantity            | Order/cac:OrderLine/cac:LineIte m/cbc:Quantity/@unitCode   | Each order line ordered quantity MUST have an associated unit of measure   | F   | BII2-T01-R030                 |
| Item name or identifier     | Order/cac:OrderLine/cac:LineIte m/cac:Item/cbc:Name Order/cac:OrderLine/cac:LineIte m/cac:Item/cac:SellersItemIdenti fication Order/cac:OrderLine/cac:LineIte m/cac:Item/cac:StandardItemIde ntification | Each order line MUST have an item identifier and/or an item name   | F   | BII2-T01-R031                 |
| Item price                  | Order/cac:OrderLine/cac:LineIte m/cac:Price/cbc:PriceAmount  | Each order line item net price MUST not be negative  | F   | BII2-T01-R011                 |
| Additional item property    | Order/cac:OrderLine/cac:LineIte<br>m/cac:Item/cac:AdditionalItemPr<br>operty/cbc:Name  | Each item property MUST have a data name, if item property is provided   | W   | BII2-T01-R019                 |
| Additional item property    | Order/cac:OrderLine/cac:LineIte m/cac:Item/cac:AdditionalItemPr operty/cbc:Value   | Each item property MUST have a data value, if item property is provided  | W   | BII2-T01-R020                 |
| General                     |  |  |     |                               |
| Attribute for currency      | //@currencyID  | currencyID MUST be coded using ISO code list 4217  | F   | OP-T01-R007                   |
| Attribute for country codes | //cac:Country/cbc:IdentificationC<br>ode/@listID   | A country identification code MUST have a list identifier attribute "ISO3166-1:Alpha2" and the id MUST be according to the code list.    | F   | EUGEN-T01-R015<br>OP-T01-R006 |
| Tax categories              | //cac:TaxCategory/cbc:ID   | A tax category identifier MUST have a scheme identifier attribute "UNCL305" and tax categories MUST be coded according to the code list. | F   | EUGEN-T01-R017<br>OP-T01-R008 |

EHF Ordering 2014-09-02 Page 45 of 48

| Name       | Element (xPath) | Error message   | F/W | Rule ID     |
|------------|-----------------|---|-----|-------------|
| Mime codes | //@mimeCode     | A Binary Object MIME code attribute MUST be coded using MIME Code Type version 2008 code list | F   | OP-T01-R003 |

# 8.4.2 ORDER RESPONSE

| Name                      | xPath   | Error message  | F/W | Rulel ID                     |
|---------------------------|---|--|-----|------------------------------|
| Profile and transaction   |   |  |     |                              |
| Customization id          | OrderResponse/cbc:CustomizationID   | An order response MUST have a customization identifier   | F   | BII2-T76-R001                |
| Profile id                | OrderResponse/cbc:ProfileID   | An order response MUST have a profile identifier   | F   | BII2-T76-R002                |
| Document level            |   |  |     |                              |
| Issue date                | OrderResponse/cbc:IssueDate   | An order response MUST have a document issue date  | F   | BII2-T76-R004                |
| Order response identifier | OrderResponse/cbc:ID  | An order response MUST have a document identifier  | F   | BII2-T76-R006                |
| Order document reference  | OrderResponse/cac:OrderReference/cbc:ID   | An order response MUST contain the reference to the order  | F   | BII2-T76-R032                |
| Response code             | OrderResponse/cbc:OrderResponseCode   | A order response MUST have a response code   | F   | BII2-T02-R033                |
| Response code             | OrderResponse/cbc:OrderResponseCode/@listID   | A response code MUST have a list identifier attribute "UNCL1225" and the response code must be according to the code list. | F   | EUGEN-T76-R003<br>OP-T76-001 |
| Document currency         | OrderResponse/cbc:DocumentCurrencyCode/@listID  | DocumentCurrencyCode MUST be coded using ISO code list 4217  | F   | OP-T76-003                   |
| Document currency         | OrderResponse/cbc:DocumentCurrencyCode  | An order response MUST be stated in a single currency  | F   | EUGEN-T76-005                |
| Party information         |   |  |     |                              |
| Endpoint id               | OrderResponse/cac:BuyerCustomerParty/cac:Party/cbc:EndpointID/@schemeID                 | An endpoint identifier MUST have a scheme identifier attribute   | F   | EUGEN-T76-R001               |
| Party identification      | OrderResponse/cac:BuyerCustomerParty/cac:Party/cac:PartyIdentification/cbc:ID/@schemeID | A party identifier MUST have a scheme identifier attribute   | F   | EUGEN-T76-R002               |

EHF Ordering 2014-09-02 Page 46 of 48



| Name                           | xPath   | Error message  | F/W | Rulel ID                     |
|--------------------------------|---|--|-----|------------------------------|
| Buyer's name or identifier     | OrderResponse/cac:BuyerCustomerParty/cac:Party/cac:Party/dentification/cbc:ID OrderResponse/cac:BuyerCustomerParty/cac:Party/cac:Party/cac:PartyName/cbc:Name | An order response MUST contain the full name or an identifier of the customer  | F   | BII2-T76-R021                |
| Seller's name or identifier    | OrderResponse/cac:SellerSupplierParty/cac:Party/cac:PartyIdentification/cbc:ID OrderResponse/cac:SellerSupplierParty/cac:Party/cac:PartyName/cbc:Name         | An order response MUST contain the full name or an identifier of the seller  | F   | BII2-T76-R022                |
| Order response line            |   |  | ,   | ·                            |
| Order response line identifier | OrderResponse/cac:OrderLine/cac:LineItem/cbc:ID   | Each order response line MUST have a document line identifier that is unique within the order response                                   | F   | BII2-T76-R003                |
| Order line reference           | OrderResponse/cac:OrderLine/cac:OrderLineReferenc e/cbc:LineID  | An order response line MUST contain a reference to its corresponding order line.   | F   | BII2-T76-R034                |
| Response code                  | OrderResponse/cac:OrderLine/cac:LineItem/cbc:LineS tatusCode  | A response line status code MUST have a list identifier attribute "UNCL1225"   | F   | EUGEN-T76-R004<br>OP-T76-002 |
| General                        |   |  |     | •                            |
| Unit code                      | //cbc:Quantity/@unitCode<br>//cbc:Quantity/@unitCodeListID  | A unit code attribute MUST have a unit code list identifier attribute "UNECERec20" and the unit code MUST be according to the code list. | F   | OP-T76-006                   |
| Tax category                   | //cac:TaxCategory/cbc:ID  | A tax category identifier MUST be coded using UN/ECE 5305 BII2 Subset  | F   | OP-T76-008                   |

EHF Ordering 2014-09-02 Page 47 of 48



## 9 ATTACHMENTS

#### 9.1 ATTACHMENT 1 - STRUCTURE TABLE

Attachment 1 provides a structured overview of the format.

#### 9.2 ATTACHMENT 2 - MESSAGE TABLE

Attachment 2 contains a Message table with all elements and attributes in EHF Order and Order Response.

#### 9.3 ATTACHMENT 3 - CODE LISTS

To ensure consistency and quality of the code lists used in EHF, a decision has been made to move these to a website. This site contains all code lists used in all the different EHF guides, and you find it here:

http://www.anskaffelser.no/temaer-elektronisk-handel/ehf-formater-innhold/kodelister

#### 9.4 ATTACHMENT 4 - UBL 2.1 SCHEMA

The UBL 2.1 Schema that the EHF order messages are based on, is found here:

http://docs.oasis-open.org/ubl/os-UBL-2.1/xsd/maindoc/UBL-Order-2.1.xsd

http://docs.oasis-open.org/ubl/os-UBL-2.1/xsd/maindoc/UBL-OrderResponse-2.1.xsd

Syntax validation is performed against these schemas.

### 9.5 ATTACHMENT 5 - SCHEMATRON FILES

Attachment 5 contains the schematron files being used in the validation of EHF Order and Order Response messages. These are based on business rules defined by CEN BII.

### 9.6 ATTACHMENT 6 - EXAMPLE FILES

Attachment 6 contains example files.

EHF Ordering 2014-09-02 Page 48 of 48