DIGITALISERINGSSTYRELSEN

OIOUBL Guideline

OIOUBL Delivery

UBL 2.0 Levering

G19

Version 1.3

Colophon

Contact:

> Danish Agency for Digitisation
>
> E-mail: support@nemhandel.dk

Contents

1. Preface

This guideline is one out of a series of documents describing the purpose and use of the business documents that comprise the Danish localization of UBL 2.0, known as OIOUBL.

For each business document, a guideline document has been prepared, as well as general guidelines describing the use of elements that apply across the documents.

1.1. Purpose of this document

This is a general guideline which is intended to specify the use of classes and fields used for the specification of delivery. See also the OIOUBL Guideline Delivery Terms (Ref. G20).

1.2. Conclusions and Recommendations

In the following the relevant conclusions and recommendations will be presented, which reflect, among other things, the discussions of the UBL working groups involved.

- An OIOUBL Order should not have different delivery parties and/or delivery addresses at line level. The Order should instead be split in order that there be one Order per delivery address. This is due to the fact that only few business systems are able to handle delivery addresses at line level.

- In OIOUBL a delivery address is specified in the *DeliveryLocation* class. Note that the class *DeliveryAddress* is not used.

1.3. Changes in version 1.3

In this latest update of this guideline the following has been changed:

- Questions and answers from FAQ on OIOUBL.info has been incorporated

2. Relevant UBL Classes and Elements

Delivery is included in the following UBL 2.0 document types:

- Order
- Invoice

Delivery is specified in the *Delivery* class.

Delivery may be specified at both document and line level.

Please note also the *DeliveryTerms* class, which is described in the OIOUBL Guideline Delivery Terms (Ref. G20).

2.1. DK field names and cardinality

The tables below list the fields and their field names in Danish, as well as the cardinality.

2.1.1. The Delivery class

UK-name	DK-name	Use
ID	ID	0..1
Quantity	Mængde	0..1
MinimumQuantity	MinimumsMængde	0..1
MaximumQuantity	MaksimumsMængde	0..1
ActualDeliveryDate	FaktiskLeveringsDato	0..1
ActualDeliveryTime	FaktiskLeveringsTid	0..1
LatestDeliveryDate	SenestLeveringsDato	0..1
LatestDeliveryTime	SenestLeveringsTid	0..1
TrackingID	SporingsID	0..1
DeliveryAddress	LeveringsAdresse	0
DeliveryLocation	LeveringsSted	0..1
RequestedDeliveryPeriod	ForespurgtLeveringsPeriode	0..1
PromisedDeliveryPeriod	LovetLeveringsPeriode	0..1
EstimatedDeliveryPeriod	EstimeretLeveringsPeriode	0..1
DeliveryParty	LeveringsPart	0..1
Despatch	Afsendelse	0..1

2.1.2. The Address class

The following relevant classes are inherited form the *Address* class (See also the OIOUBL Guideline Addresses, Ref. G36):

- *DeliveryLocation/Address*
- *DeliveryParty/PostalAddress*
- *DeliveryParty/PhysicalLocation*
- *Despatch/DespatchAddress**
- *Despatch/DespatchParty/PostalAddress*

- *Despatch/DespatchParty/PhysicalLocation*

*Please notice that use of *Despatch* is bilateral agreed

UK-name	DK-name	Use
ID	ID	0..1
AddressTypeCode	TypeKode	0..1
AddressFormatCode	FormatKode	1
Postbox	Postboks	0..1
Floor	Etage	0..1
Room	Rum	0..1
StreetName	Vejnavn	0..1
AdditionalStreetName	VejAdresseringsNavn	0..1
BuildingName	Lokalitet	0..1
BuildingNumber	Husnummer	0..1
Department	Afdeling	0..1
MarkAttention	Attention	0..1
MarkCare	C/O	0..1
CityName	ByNavn	0..1
PostalZone	Postnummer	0..1

2.1.3. The DeliveryLocation class

UK-name	DK-name	Use
ID	ID	1
Description	Description	0..1
Conditions	Betingelser	0..1
ValidityPeriod	GyldighedsPeriode	0..n
Address	Adresse	0..1

2.1.4. The Period class

The following classes are all inherited from the *Period* class:

- *RequestedDeliveryPeriod*

- *PromisedDeliveryPeriod*

- *EstimatedDeliveryPeriod*

- *ValidityPeriod*

Note that *PromisedDeliveryPeriod* and *EstimatedDeliveryPeriod* are excluded from some documents. The allowed period specifications are described in the different document guidelines (OIOUBL_GUIDE_ORDRE Ref. G08 and OIOUBL_GUIDE_FAKTURA Ref. G16)

UK-name	DK-name	Use
StartDate	StartDato	0..1
StartTime	StartTid	0..1
EndDate	SlutDato	0..1
EndTime	SlutTid	0..1
Description	Description	0..n

2.1.5. The Party class

The following classes are all inherited from the *Party* class:

- *DeliveryParty*
- *DespatchParty**

*Please notice that use of *Despatch* is bilateral agreed

UK-name	DK-name	Use
WebsiteURI	Hjemmeside	0..1
LogoReferenceID	LogoReference	0..1
EndpointID	EndePunktID	0..1
PartyIdentification	PartIdentifikation	0..n
PartyName	PartNavn	0..n
PostalAddress	PostAdresse	0..1
PhysicalLocation	FysiskLokation	0..1
PartyTaxScheme	AfgiftOplysninger	0..n
PartyLegalEntity	JuridiskPart	1
Contact	Kontakt	0..1
Person	Person	0..1

See also the cross-referential guidelines OIOUBL Guideline Party (Ref. G23), OIOUBL Guideline EndpointID (Ref. G22), OIOUBL Guideline Contact (Ref. G34).

2.1.6. The Despatch* class

UK-name	DK-name	Use
ID	ID	0..1
RequestedDespatchDate	ForespurgtAfsendelsesDato	0..1
RequestedDespatchTime	ForespurgtAfsendelsesTid	0..1
EstimatedDespatchDate	EstimeretAfsendelsesDato	0..1
EstimatedDespatchTime	EstimeretAfsendelsesTid	0..1
ActualDespatchDate	FaktiskAfsendelsesDato	0..1
ActualDespatchTime	FaktiskAfsendelsesTid	0..1
DespatchAddress	AfsendelsesAdresse	0..1
DespatchParty	AfsenderPart	0..1
Contact	Kontakt	0..1

*Please notice that use of *Despatch* is bilateral agreed

3. Description

The following sections contain further descriptions of the use of relevant classes and fields.

3.1. Business related use of Delivery

Overall, the *Delivery* class makes it possible to enter the following information:

- Delivery quantities
- Delivery time (date and time)
- Delivery period
- A number of business parties
- A number of address details

In the following sections the commercial use of these data is described in further detail.

Please note that the *Delivery* class may repeated for every partial delivery that may be requested, and that it can occur both at header and at line level. Specifying this class is not a requirement.

3.1.1. Delivery Quantities

For every instance of the *Delivery* class, the following delivery quantities may be specified:

- The quantity for the shipment
- The minimum quantity
- The maximum quantity

On instance of the *Delivery* class equals one partial delivery. OIOUBL provides no automation or fields for relating the quantities in partial deliveries to the agreed total quantity.

3.1.2. Delivery Time

For every instance of the *Delivery* class, the following delivery times may be specified:

- An actual delivery date and time
- The latest possible delivery date and time

Please note that OIOUBL has no date field in which to specify a requested delivery date. Instead, there is the *RequestedDeliveryPeriod* class, in which start and end dates may be specified as identical.

OIOUBL contains a field for specifying the actual delivery date and time, but there is no class for specifying an actual delivery period. In such case, the last date in the period is entered as the actual delivery date.

3.1.3. Delivery Period

For every instance of the *Delivery* class, the following delivery periods may be specified:

- Requested delivery period

- Guaranteed delivery period

- Estimated delivery period

A period is specified by a start and an end time. A description may also be entered for the period. Note that not all periods can be used in all documents.

OIOUBL contains a field for specifying the actual delivery date and time, but there is no class for specifying an actual delivery period. In such case, the last date in the period is entered as the actual delivery date.

When specifying delivery times and periods, the provisions of the Danish VAT legislation (Momsloven) on these matters must be observed.

3.1.4. Business parties and address details

For every instance of the *Delivery* class, the following may be specified:

- A *DeliveryLocation.Address*

- A *DeliveryLocation*

- A *DeliveryParty*

- A *Despatch*

For each of the two business parties it is also possible to specify a number of addresses.

From a pure business perspective, it is important to distinguish between **DeliveryLocation.Address** and **DeliveryParty**.

The *DeliveryParty* is the business party who is responsible for receiving the delivered item, and who takes over the legal ownership of the item. Nevertheless, the address of the *DeliveryParty* is not necessarily the address that the items should be delivered to. If the item is to be delivered at a different address, this address is specified in *DeliveryLocation.Address*.

An example may be an appliance for a private citizen, which is to be delivered at the citizens home address (*DeliveryLocation.Address*), but the aid and appliance warehouse at the hospital has the ownership of the appliance, and are therefore the *DeliveryParty*.

The *Despatch* specifies to a possible business party where the item is physically located, and from where it must be sent/transported to the *DeliveryParty* or the *DeliveryLocation.Address*.

An example may be a supplier of aids and appliances who uses one or more business parties as warehouses. In such case, the warehouse becomes the *Despatch*.

3.1.4.1. Name/Attention in Delivery Location
In the OIOUBL Address class there is no element for name like e.g. "The little school". This name is specified in the *Delivery.DeliveryLocation.Address.MarkAttention* field. Other Address fields are used as described in guide G36 OIOUBL Address. Notice that a name is not always needed in the Delivery Location. Often the street name and house number, postal code and city are sufficient.

If both a name and an attention person are needed, they are bot described in the *MarkAttention* field e.g. "The little school, att. Hans Hansen"

3.1.4.2. Delivery Location identified by ID
If there is a need to specify an ID for the Delivery Location, either instead of the address or in addition to the address it is added to the element *Delivery.DeliveryLocation.ID*. The ID can refer to an official list like a GLN number, or the ID can be agreed between the parties.

In this last case the attribute *schemeAgencyID* must identify the local system maintaining the ID, and the *schemeID* value is "ZZZ". In addition to the ID an informative text description like "Goods Reception" can be added to the element *Delivery.DeliveryLocation.Description.*

```
<cac:DeliveryLocation>
     <!-- Using a mutual agreed ID to point to delivery point -->
     <cbc:ID schemeAgencyID="urn:sydvestjysksygehus:dk:system:01" schemeID="ZZZ">3405</cbc:ID>
     <cbc:Description>Goods Reception</cbc:Description>
</cac:DeliveryLocation>
```

3.1.5. Service Recipients

A Service recipient can e.g. be a person, who is granted some facility by the municipality, but who makes the arrangements for e.g. fittings or adjustments with the supplier by himself. The supplier sends the invoice directly to the municipality, and the municipality is then able to close the case based on the Danish Personal Identification Number (CPR).

If a person takes over the ownership of the products (e.g. medicine, glasses, footwear) the Personal Identification Number is specified in the element *Delivery.DeliveryParty.PartyLegalEntity.CompanyID* and with *schemeID*="DK:CPR".

If a person just lent a facility like a wheelchair from the municipality or is responsible for receiving the product, the Personal Identification Number (CPR) is specified in *Delivery.DeliveryParty.PartyIdentitication.ID* with *schemeID*="DK:CPR" or only the address is specified in *DeliveryLocation.* Any lending certificate is not relevant to the invoice in this case.

3.1.5.1. Foreign Service Recipients
If the Service Recipient is a foreigner without a Danish Personal Identification Number another ID can be used for identification. It can e.g. be a foreign Personal Identification Number and/or a Country Code.

The requirements for identifying the foreign Service Recipients can vary between public authorities.

If the Service Recipient takes over the ownership of the product, the identification must be specified in *Delivery.DeliveryParty.PartyLegalEntity.CompanyID,* and the *schemeID* is set to "ZZZ". (Codelist: http://oioubl.info/codelists/da/urn_oioubl_scheme_partylegalentitycompanyid-1.1.html) See example:

```
<cac:PartyLegalEntity>

    <cbc:RegistrationName>Name on person</cbc:RegistrationName>

    <cbc:CompanyID schemeID="ZZZ">12121960123</cbc:CompanyID>

</cac:PartyLegalEntity>
```

It the ownership is not taken over, the identification is specified in
Delivery.DeliveryParty.PartyIdentification.ID. Also here the *schemeID* is set to "ZZZ" (Codelist:
http://oioubl.info/codelists/da/urn_oioubl_scheme_partyidentificationid-1.1.htmll) See example:

```
<cac:PartyIdentification>

    <cbc:ID schemeID="ZZZ">12121960123</cbc:ID>

</cac:PartyIdentification>
```

3.2. Document and Line level

In OIOUBL the *Delivery* class may, technically, be specified at both document and line level.
Nevertheless, only few business systems are able to handle *DeliveryLocation.Address* and/or
DeliveryParty at line level.

It is therefore recommended that *DeliveryLocationAddress*s and/or *DeliveryParty* only be specified
in *Delivery* at document level.

In case of partial deliveries, that is when the class occurs more than once at document level, the
same *DeliveryLocation.Address* and/or *DeliveryParty* should be specified for all instances.

Quantity and time specifications may be entered at line level.

Please note that the above mentioned is only a recommendation for practical use. OIOUBL fully
supports specifying *Delivery* at both header and line level, in which case the rules are the following:

- Specifying *Delivery* at header level determines the default parameters for the given
  document instance.

- Any specification of *Delivery* at line level overwrites the default parameters for this line.

3.3. Use of the Delivery class

Table 1 below briefly describes the fields and classes that are included in *Delivery.*

UK-name	DK-name	Use	Explanation:
ID	ID	0..1	Identification of the instance in question (partial delivery). For example a number sequence
Quantity	Mængde	0..1	The quantity of the delivery.
MinimumQuantity	MinimumsMængde	0..1	The minimum quantity of the delivery.
MaximumQuantity	MaksimumsMængde	0..1	The maximum quantity of the delivery.
ActualDeliveryDate	FaktiskLeveringsDato	0..1	Actual delivery date.
ActualDeliveryTime	FaktiskLeveringsTid	0..1	Actual delivery time.
LatestDeliveryDate	SenestLeveringsDato	0..1	The latest delivery date allowed by the buyer.
LatestDeliveryTime	SenestLeveringsTid	0..1	The latest delivery time allowed by the buyer.
TrackingID	SporingsID	0..1	The tracking ID of the delivery (In relation to transportation). May only be used when bilateral agreed.
DeliveryAddress	LeveringsAdresse	0	Delivery address.

DeliveryLocation	LeveringsSted	0..1	Delivery location. May be used as an alternative to DeliveryAddress. Normally not used.
RequestedDeliveryPeriod	ForespurgtLeveringsPeriode	0..1	Requested delivery period. Se also section 3.4.
PromisedDeliveryPeriod	LovetLeveringsPeriode	0..1	The guaranteed delivery period. Se also section 3.4.
EstimatedDeliveryPeriod	EstimeretLeveringsPeriode	0..1	Estimated delivery period Se also section 3.4.
DeliveryParty	LeveringsPart	0..1	Delivery party.
Despatch	Afsendelse	0..1	A possible Despatch party. May only be used when bilateral agreed.

Table 1. Use of the *Delivery* class.

Figure 1 shows an example of how to fill out the Delivery class.

```
<cac:Delivery>
      <cbc:ActualDeliveryDate>2015-11-20</cbc:ActualDeliveryDate>
</cac:Delivery>
```

Figur 1. Example of how to fill out a *Delivery* class.

3.4. Use of the Period class

The following classes are all inherited from the *Period* class:

- *RequestedDeliveryPeriod*

- *PromisedDeliveryPeriod*

- *EstimatedDeliveryPeriod*

Table 2 below briefly describes the fields and classes that are included in *Period*.

UK-name	DK-name	Use	Remarks
StartDate	StartDato	0..1	The period specification must contain a start date and/or an end date. If only the start date is specified, the validity period has no time limit.
StartTime	StartTid	0..1	The Start Time can be specified with a clock time.
EndDate	SlutDato	0..1	An End Date may be specified for the period.
EndTime	SlutTid	0..1	The End Time can be specified with a clock time.
DurationMeasure	VarighedsKode	0	Not used in OIOUBL.
DurationMeasure@unitCode		0	Not used in OIOUBL.
DescriptionCode	BeskrivelsesKode	0	Not used in OIOUBL.
Description	Description	0..n	Supplementary free text.

Table 2. Use of the *Period* class.

Figure 2 shows an example of how to fill out the *Period* class.

```
<cac:RequestedDeliveryPeriod>
      <cbc:StartDate>2007-01-01</cbc:StartDate>
      <cbc:EndDate>2007-12-31</cbc:EndDate>
      <cbc:Description>Abonnement</cbc:Description>
</cac:RequestedDeliveryPeriod>
```

Figur 2. Example of how to fill out a *Period* class.

As shown in table 2, a number of more advanced options exist for specifying a period.

Basically, a *StartDate* and an *EndDate* may be specified, and these may be supplemented with times in *StartTime* and *EndTime*. If only a StartDate is specified, the period is valid indefinitely. *StartDate* and *EndDate* can be identical, but *EndDate* must not be before *StartDate*.

```
<cac:ValidityPeriod>

   <cbc:StartDate>2006-08-01</cbc:StartDate>

   <cbc:StartTime>12:00:00</cbc:StartTime>

   <cbc:EndDate>2007-08-01</cbc:EndDate>

   <cbc:EndTime>12:00:00</cbc:EndTime>

</cac:ValidityPeriod>
```

Figure 3. Example of use of the *Period* class (with specification of times)

4. Examples

Shown below are examples of how to fill out the *Delivery* class.

4.1. The Delivery class in a typical order

A simple example of how to fill out *Delivery* is shown below.

```
<cac:Delivery>
      <cac:RequestedDeliveryPeriod>
              <cbc:StartDate>2006-11-20</cbc:StartDate>
              <cbc:EndDate>2006-11-20</cbc:EndDate>
      </cac:RequestedDeliveryPeriod >
</cac:Delivery>
```

4.2. Example of extended use of the Delivery class

In the example, the hospital is the *DeliveryParty*, i.e. the business party responsible for receiving the delivered item, but the item must be shipped to patient at a different address which is specified in the *DeliveryLocation.Address*.

```
<cac:Delivery>
      <cbc:ActualDeliveryDate>2005-11-15</cbc:ActualDeliveryDate>
      <cac:DeliveryLocation>
        <cac:Address>
            <cbc:AddressFormatCode listAgencyID="320" listID="urn:oioubl:codelist:addressformatcode-
1.1">StructuredDK</cbc:AddressFormatCode>
            <cbc:StreetName>Patientvej</cbc:StreetName>
            <cbc:BuildingNumber>10</cbc:BuildingNumber>
            <cbc:CityName>Helsingør</cbc:CityName>
            <cbc:PostalZone>3000</cbc:PostalZone>
            <cac:Country>
            <cbc:IdentificationCode>DK</cbc:IdentificationCode>
            </cac:Country>
        </cac:Address>
      </cac:DeliveryLocation>
      <cac:DeliveryParty>
         <cbc:EndpointID schemeID="DK:CVR">DK15121512</cbc:EndpointID>
         <cac:PartyIdentification>
            <cbc:ID schemeID="DK:CVR">DK15121512</cbc:ID>
         </cac:PartyIdentification>
         <cac:PartyName>
            <cbc:Name>Aalborg Sygehus</cbc:Name>
         </cac:PartyName>
```

```
        <cac:PostalAddress>

            <cbc:AddressFormatCode listAgencyID="320"
listID="urn:oioubl:codelist:addressformatcode-1.1">StructuredDK</cbc:AddressFormatCode>

            <cbc:StreetName>Sygehusvej</cbc:StreetName>

            <cbc:BuildingNumber>11</cbc:BuildingNumber>

            <cbc:CityName>Dyssegård</cbc:CityName>

            <cbc:PostalZone>2870</cbc:PostalZone>

            <cac:Country>

                <cbc:IdentificationCode>DK</cbc:IdentificationCode>

            </cac:Country>

        </cac:PostalAddress>

        <cac:PartyLegalEntity>

            <cbc:RegistrationName>Aalborg Sygehus</cbc:RegistrationName>

            <cbc:CompanyID schemeID="DK:CVR">DK15121512</cbc:CompanyID>

        </cac:PartyLegalEntity>

        <cac:Contact>

            <cbc:ID>LAGER</cbc:ID>

            <cbc:ElectronicMail>lager@sygehus.dk</cbc:ElectronicMail>

        </cac:Contact>

    </cac:DeliveryParty>

</cac:Delivery>
```

5. Relevant code lists

Codelist:	Agency:	Urn:	Example values:
AddressFormatCode	320	urn:oioubl:codelist:addressformatcode-1.1	StructuredLax
EndpointID	320	urn:oioubl:scheme:endpointid-1.4	GLN, DK:CVR etc.

6. Terms and abbreviations

Listed below are the most important terms and abbreviations:

Term:	Explanation:
Document level	Fields on header level are all the fields that are found directly under the root element (the top element) in the XML structure. Fields on header level apply to the whole document.
Line level	Fields at line level only apply to the specific catalogue line, unlike fields at header level
Class	A class is a collection of fields. For example, the Price class contains fields such as PriceAmount, BaseQuantity, etc.
Fields	A field is an element in the XML structure. For example, the PriceAmount is the field containing the price in an invoice line.
Attributes	In an XML element, frequently it is possible to specify a property for the field in an attribute, e. g. the attribute unitCode in which the unit for a quantity may be specified, as in the example: <cbc:BaseQuantity unitCode="BO">1</cbc:BaseQuantity> The attributes is also the place where reference is made to the relevant codelists, such as: listID="urn:oioubl:codelist:taxtypecode-1.2"