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OIOUBL Guideline

UBL 2.0 Response

OIOUBL Bekræftelse

G35

Version 1.1



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Colophon

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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

The purpose of this document is to supplement the technical Guideline OIOUBL ApplicationResponse (Ref. G02).

The document attempts to explain topics regarding the use of the document and regarding fields and values which are not described in the Guideline OIOUBL ApplicationResponse (Ref. G02) or OIOUBL Guideline Profiles (Ref. G26). It is not within the scope of this document to modify the specifications of the above mentioned guidelines, but should further explain the use of application responses.

1.2 Conclusions and Recommendations

The ApplicationResponse is a business document in the same right as business documents such as Invoice and Order. This document, however, has a particular significance within the business process. The ApplicationResponse document has been chosen as a common document for exchanging information about both approval and rejection, respectively, of received document.

The ApplicationResponse is used rejecting a document, both due to technical reasons, such as semantics- or syntax-related issues, or because the receiver does not support the profile specified within the received document, or it may be used for accepting or rejecting a document for business related reasons.

This may be an invoice that is rejected by the receiver, because it contains a faulty or missing validation data. In such cases, an ApplicationResponse is returned containing a message of the problem. Even if the Invoice is valid, it may be rejected for business reasons. An invoice, for example, that contains the wrong number of items compared to what was delivered, may be rejected. In such cases the ApplicationResponse is also used to reject the document containing a message about the reason for the rejection.

The ApplicationResponse is also use when receiving a document that refers to a business scenario that is not supported (For further information about Profiles, please see the Guideline OIOUBL Profile (Ref. G26).

1.2.1 Specifications

DocumentID	Role sender	Role receiver
ApplicationResponse-2	SenderParty	ReceiverParty

DocumentID	ApplicationResponse
Namespace	urn:oasis:names:specification:ubl:schema:xsd:ApplicationResponse-2

2. Relevant UBL Classes and Elements

2.1 DK field names and cardinality

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

2.1.1 Header level

UK-name	DK-name	Use
UBLVersionID	UBLVersionID	1
CustomizationID	SpecialtilpasningsID	1
ProfileID	ProfilID	1
ID	ID	1
IssueDate	UdstedelsesDato	1
Note	Note	0..n
SenderParty	AfsenderPart	1
ReceiverParty	ModtagerPart	1
DocumentResponse	DokumentReference	1

2.1.2 The SenderParty class

UK-name	DK-name	Use
Party/EndpointID	EndePunktID	1
Party/Partyidentification/ID	PartnerID	0..1
Party/PartyName/Name	PartnerNavn	0..1
Party/Contact/ID	Personreference	0..1*
Party/PartyLegalEntity/CompanyID	RegistreringsNummer	1

*Note that Contact.ID is mandatory for some document types, as described below

2.1.3 The ReceiverParty class

UK-name	DK-name	Use
Party/EndpointID	EndePunktID	1
Party/Partyidentification/ID	PartnerID	0..1
Party/PartyName/Name	PartnerNavn	0..1
Party/Contact/ID	Personreference	0..1*
Party/PartyLegalEntity/CompanyID	RegistreringsNummer	1

*Note that Contact.ID is mandatory for some document types, as described below

2.1.4 The DocumentResponse/Response class

UK-name	DK-name	Use
ReferenceID	ReferenceID	1
ResponseCode	ResponseKode	1
Description	Beskrivelse	0..n

2.1.5 The DocumentResponse/LineResponse/LineReference class

UK-name	DK-name	Use
LineID	LinjeID	1

2.1.6 The DocumentResponse/LineResponse/Response class

UK-name	DK-name	Use
ReferenceID	ReferenceID	1
ResponseCode	ResponseKode	1
Description	Beskrivelse	0..n

2.2 ProfileID

The *ProfileID* for an ApplicationResponse must usually be the same as the *ProfileID* specified in the received document. If, for example, an Invoice is received which contains the *ProfileID* "Procurement-BilSim-1.0", and this document cannot obtain the business-related acceptance, the Profile ID of the ApplicationResponse must be "Procurement-BilSim-1.0".

It is used likewise, if the receiver does not support receipt of the document with the specified profile. If, for example, an invoice is received with the *ProfileID* "Procurement-BilSim-1.0", and the receiver does not support this profile, the Profile ID of the ApplicationResponse must be "Procurement-BilSim-1.0".

If a document is received which has an invalid value specified in *ProfileID*, or if it is otherwise technically invalid, the value "NONE" should be entered in the Profile ID.

2.3 ID

To the individual ApplicationResponse document an *ID* is attached, which must be unique for the respective Party.

The *UUID* field may be used as a supplement to specify the global uniqueness.

2.4 SenderParty

The Sender Party must be specified by either *Partneridentification/ID* and/or *PartyName/Name*), and the *LegalPartyEntity/CompanyID*, as well as the *EndpointID*.

If the documents in question contain requirements for the specification of personal references, i.e. documents such as Invoice and CreditNote, the *Contact/ID* must be specified.

The remaining information is optional.

2.5 ReceiverParty

The Sender Party must be specified by either *Partneridentification/ID* and/or *PartyName/Name*), and the *LegalPartyEntity/CompanyID*, as well as the *EndpointID*.

If the documents in question contain requirements for the specification of personal references, i.e. documents such as Invoice and CreditNote, the *Contact/ID* must be specified.

The remaining information is optional.

2.6 DocumentResponse

The *DocumentResponse* class is used to enter a message about the processing of a particular document, and as a reference to the document being processed. The class has three sub-classes, namely:

- *Response*, which is used for specifying a reference to the document that was processed. If the document is processed as an entity, this will also be specified here.
- *DocumentReference*, which is used for identifying the document that the *ApplicationResponse* pertains to.
- *LineResponse*, which is used for identifying the individual lines of the document that the *ApplicationResponse* pertains to, as well as the processing status of these.

2.6.1 Response

The *ResponseCode* is crucial, as this specifies processing status of the referenced document. This may be an accept or rejection of the document, and a specification of the type in question (technical, profile, or business-related), as described in section 3.

This code may also occur at line level, as per the below section 2.6.3. For most documents, such as Invoice, CreditNote, and Reminder, the code is only relevant at header level, as the entire document is being rejected.

2.6.2 DocumentReference

The *DocumentReference* is used for specifying a reference to the document that the *ApplicationResponse* pertains to. Both the *ID* and the *DocumentTypeCode* must always be specified for the reference document and the *IssueDate* could be specified as well.

If these data are not available in the received document, the value in the *DocumentReferenceId* is set to "1", the *IssueDate* to "0001-01-01", and the *DocumentTypeCode* to "MutuallyDefined".

2.6.3 LineResponse

LineResponse is used for informing of the processing status of the document at line level.

For certain documents, such as Invoice, CreditNote, and Reminder, the code is only relevant at header level, as the entire document is being rejected. Status information that occurs at line level in these documents is only informative.

For certain other documents, such as the Catalogue documents, the code specified at line level may have relevance, as individual lines may be rejected or approved in these documents.

The *LineId* must always refer to the Line ID of the document that the *ApplicationResponse* refers to.

3. Description

The ApplicationResponse is used in all situations to exchange information about the processing of a document, including the ApplicationResponse document itself.

The use of the ApplicationResponse has three main purposes:

- Technical
- Profile
- Business-related

The ApplicationResponse has two status types – either Accept or Reject. An Accept can only be business-related, and therefore no ApplicationResponse is returned if a document is technically valid, or if it conforms with the profile.

Consequently, there are no intermediary types, such as for example conditional accepts. This means that an Accept means that the receiver sends a response for having received the document, and thus the responsibility for processing the document is transferred to the receiver. Contrarily, a Reject means that the receiver has rejected the processing, and the responsibility for the continued processing of the document remains with the sender.

The three status types are used sequentially. This means that the received documents first undergo a technical validation, then the *ProfileID* is checked, and finally the business-related processing of the document is performed.

This means that, for example, if a Reject is received with the ResponseCode "ProfileReject", this states that the document is technically valid. Therefore, only one ApplicationResponse is sent when the document is rejected.

3.1 Technical

The technical use concerns everything that has to do with the validation, form, and format of the document. This includes, for example, reading and recognition of the document, validation of semantics and syntax, usually in the shape of schema and schematron validation, as well as all other technical problems that may occur when processing the document.

The technical use is separate from the business and profile-related use, because rejecting the document for technical reasons has no relevance to purpose of the document.

This means, for example, that an order may very well be rejected due to technical reasons, e. g. if it is not schematron valid, even if the receiver has not considered the content of the document. In such cases the Reject does not concern the order as such, but merely the fact that the receiver cannot read and decode the order.

A technical Reject should be considered as if the document has not been delivered to the receiver. For example, if an Invoice has been rejected for technical reasons, the sender cannot claim payment until a technically valid Invoice has been sent.

3.2 Profile

The profile-related use occurs when processing the document in relation to the *ProfileID* specified in the document.

In every document it must be specified which profile the document relates to. A profile expresses which documents a given party can send and receive, respectively, in a business process. See also OIOUBL Profiles (Ref. G26).

For example, an Invoice may have the following value as *ProfileID*:

- Procurement-BilSim-1.0 (Billing Simple)

Because the sender does not necessarily know which ability to process a given document, the sender may happen to apply a *ProfileID* that is not supported by the receiver.

If for example the sender specifies the *ProfileID* "Procurement-OrdSim-BilSim-1.0" (Ordering Simple to Billing Simple), but the receiver only supports "Procurement-BilSim-1.0" (BillingSimple), there is a conflict between the sender's expectations and the abilities of the receiver.

Even though an invoice can be received under both the "Procurement-OrdSim-BilSim-1.0" as well as the "Procurement-BilSim-1.0" scenario, in such cases the receiver must return an ApplicationResponse informing the sender that the document is rejected. The sender can then adjust his expectations (*ProfileID*) to match the receivers abilities, and send the adjusted document. The reason for the strict use of the *ProfileID* is that the type of validation that is required may vary, for example, for an Invoice document depending on whether it is sent under the "Procurement-OrdSim-BilSim-1.0" profile or the "Procurement-BilSim-1.0" profile.

3.2.1 Profile with "R" response

In most business processes (profiles) it is possible to specify whether a response is always required for the receipt of a given document. This is often done by use of an ApplicationResponse. The profiles are named in such a way that the profiles that contain a positive response in the shape of a business response contain an "R" after the profile name. For example, the "Procurement-BilSim-1.0" profile contains a response variant named "Procurement-BilSim**R**-1.0".

This means that, if an invoice is received in which the "Procurement-BilSim**R**-1.0" profile is specified, the receiver **must** return an ApplicationResponse as a confirmation that the document has been processed, and the invoice is accepted.

3.3 Business-related

The business-related use comprises everything to do with the processing of the document's purpose and content. During business-related processing the receiver considers the content of the document, and not the form and format of it.

This means that rejecting an invoice for business reasons must be grounded in regular reasons why the invoice is not to be paid, such as if the invoice does not conform to Danish VAT legislation (Momsloven), or the Invoice contains items that were not delivered.

The business-related use also includes the processing of the document in relation to preceding documents. For example, if an invoice does not contain correct invoicing in reference to a preceding order or delivery.

It should be noted that special conditions apply to the use of the `ApplicationResponse` in relation to the ordering process, because the `OrderResponseSimple` document and the `OrderResponse` document are used instead of an `ApplicationResponse` when accepting or rejecting an order for business reasons. An `ApplicationResponse` that is issued with a reference to an order does therefore not express that the order is accepted or rejected, but only that the `Order` document has been received or that it cannot be read. This also applies to the `OrderChange` document.

3.4 Usage

The document may be used either in relation to the entire document or to part of it (line level).

The nature of the document may be that it is only relevant to process the entire document.

A reject or accept of a document for technical reasons applies to the entire document. When used as a response for the receipt of the document, such as the `ProfileID` with the value "R", this also applies to the entire document.

The business-related use may be partial or for the entire document. For certain documents it is only relevant to consider the entire document. This applies to, for example, the following documents:

- Invoice, CreditNote, Reminder, and Statement, as it makes no sense to process these partially.
- OrderResponseSimple, OrderCancellation, and CatalogueDeletion as these documents have no line level.
- ApplicationResponse is also always used in its entirety, and never at line level.

Other documents may be subject to partial acceptance or rejection. This applies for example to the Catalogue documents

- Catalogue
- CatalogueItemSpecificationUpdate
- CataloguePricingUpdate
- CatalogueRequest

The distinction between processing the entire document or only processing it partially is specified at header and line level, respectively, in the `ApplicationResponse`.

The main rule is that the header level response code applies. If the response code at line level differs from this, it overrides the header level code. This is relevant when a Catalogue is accepted (`BusinessAccept`), but some lines are not accepted. The lines that are not accepted will therefore be given the value "`BusinessReject`".

The `DocumentResponse/LineResponse/Response/ResponseCode` field can only be specified as "`BusinessAccept`" or "`BusinessReject`", as the remaining reject reasons are only relevant at header level.

3.4.1 Processing a received document

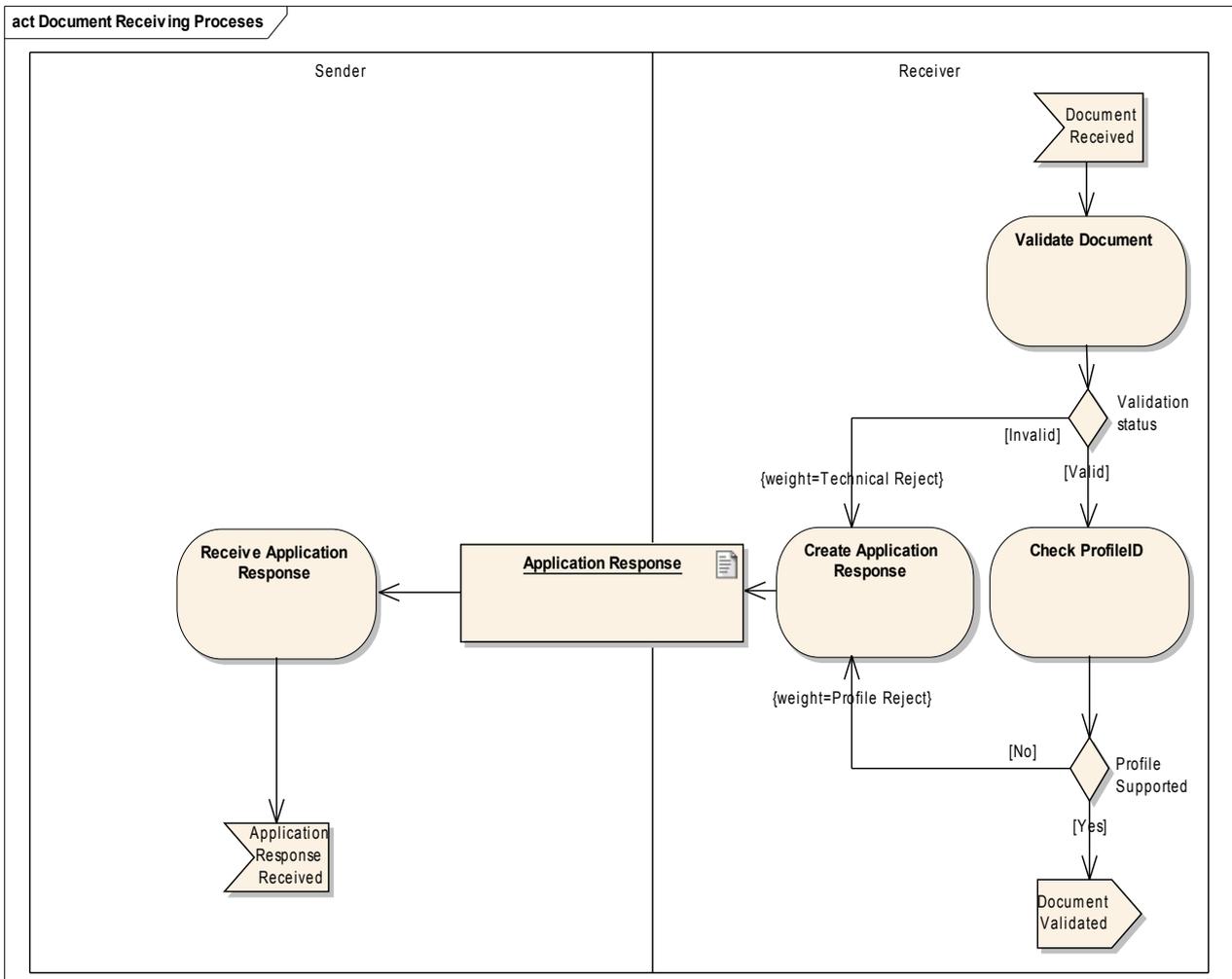


Figure 1. Normative process for receipt of a document

This process shows the technical flow of validating any received document – even the ApplicationResponse document itself.

If the document is invalid, or if a profile of the "R" type is received, an ApplicationResponse must be returned to the sender.

3.4.2 System Process: Response

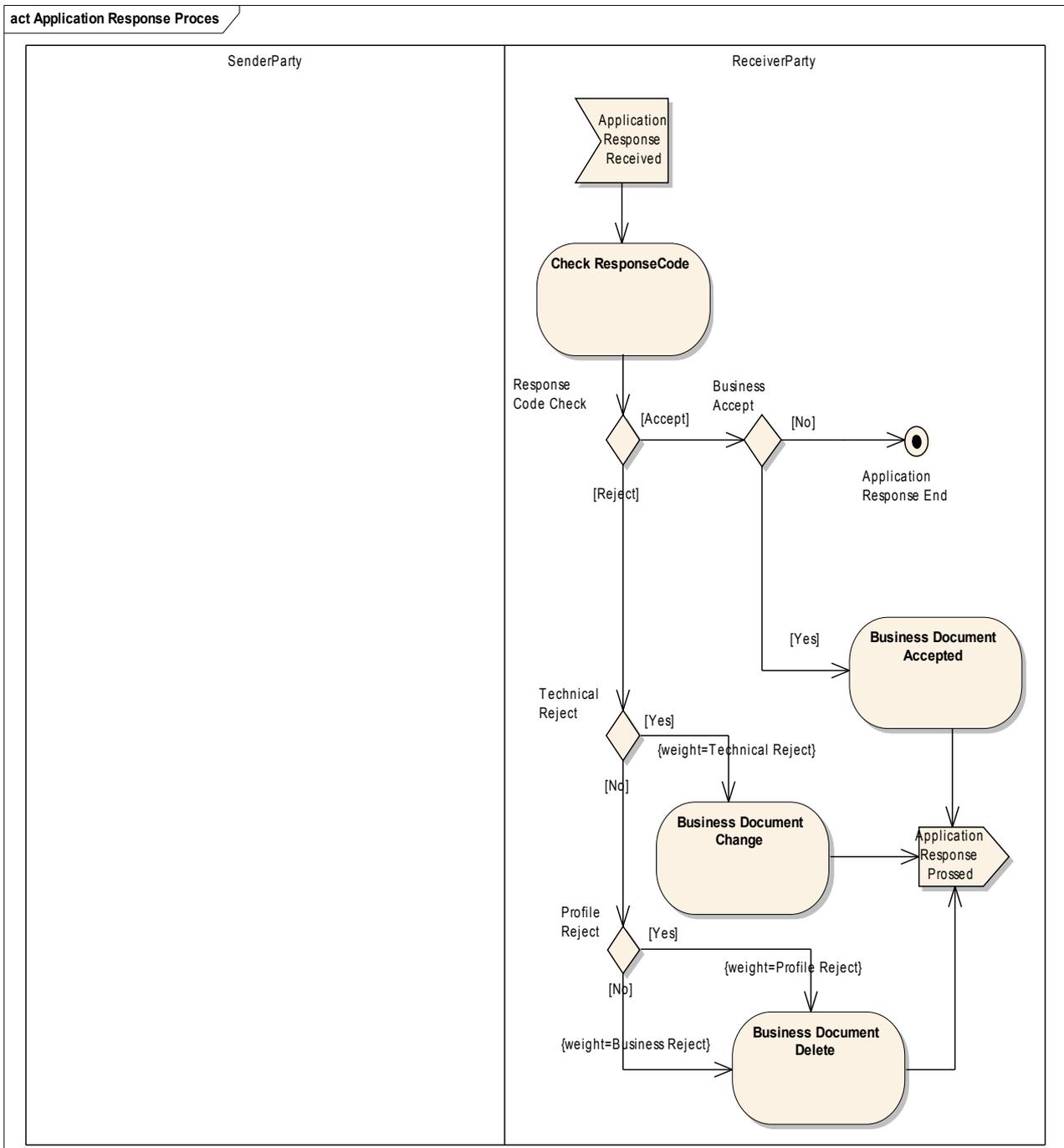


Figure 2. Normative ApplicationResponse process

This process shows how the ApplicationResponse document is processed. Upon receipt of an ApplicationResponse the *ResponseCode* is checked in order to determine whether it is an accept or a reject code.

If it is an accept code, the document is processed depending on the accept type in question.

If the *ResponseCode* is a reject, the type of reject code is determined. If it is a *TechnicalReject*, the received document is invalid, and the error must be corrected by the sender.

If it is a *ProfileReject*, the reason is that the receiver does not support receipt of documents with the specified *ProfileID*, and is therefore not capable of reading and decoding the document. The error must be corrected by the sender.

If the document is rejected for business-related reasons, the reason for the reject is processed, and the continued processing of the document is determined based on the reject reason.

4. Examples

The examples shows acceptance and rejection of documents with specification of *ResponseCode*:

4.1 Technical Reject

The example shows an invoice that is rejected for technical reasons because the document does not confirm with the Guideline for Invoice.

```
<cac:ProfileID schemeAgencyID="320" schemeID="urn:oiubl:id:profileid-1.1">
    Procurement-BilSim-1.0
</cac:ProfileID>
....
<cac:DocumentResponse>
    <cac:Response>
        <cbc:ReferenceID>1</cbc:ReferenceID>
        <cbc:ResponseCode listAgencyID="320" listID="urn:oiubl:codelist:responsecode-1.1">
            TechnicalReject</cbc:ResponseCode>
        <cbc:Description>The document is not valid regarding to OIOUBL</cbc:Description>
    </cac:Response>
    <cac:DocumentReference>
        <cbc:ID>12345</cbc:ID>
        <cbc:UUID>3a6252a4-8816-1029-857a-e388fe63f399</cbc:UUID>
        <cbc:IssueDate>2006-06-30</cbc:IssueDate>
        <cbc:DocumentTypeCode listAgencyID="320" listID="urn:oiubl:codelist:
            responsedocumenttypecode-1.1">Invoice</cbc:DocumentTypeCode>
    </cac:DocumentReference>
</cac:DocumentResponse>
```

4.2 Technical Reject with invalid ProfileID

```
<cac:ProfileID schemeAgencyID="320" schemeID="urn:oiubl:id:profileid-1.1">NONE</cac:ProfileID>
....
<cac:DocumentResponse>
    <cac:Response>
        <cbc:ReferenceID>1</cbc:ReferenceID>
        <cbc:ResponseCode listAgencyID="320" listID="urn:oiubl:codelist:responsecode-1.1">
            TechnicalReject</cbc:ResponseCode>
        <cbc:Description>The ProfileID is not valid regarding to profile id-
            list</cbc:Description>
    </cac:Response>
    <cac:DocumentReference>
        <cbc:ID>12345</cbc:ID>
        <cbc:UUID>3a6252a4-8816-1029-857a-e388fe63f399</cbc:UUID>
        <cbc:IssueDate>2006-06-30</cbc:IssueDate>
        <cbc:DocumentTypeCode listAgencyID="320" listID="urn:oiubl:codelist:
            responsedocumenttypecode-1.1">Invoice</cbc:DocumentTypeCode>
```

```
</cac:DocumentReference>
</cac:DocumentResponse>
```

4.3 ProfileReject

This is an example of a Reminder which is rejected because the receiver does not support the document type (Reminder) in the specified profile.

```
<cac:ProfileID schemeAgencyID="320" schemeID="urn:oioubl:id:profileid-1.1">
  Procurement-BilSim-1.0
</cac:ProfileID>
....
<cac:DocumentResponse>
  <cac:Response>
    <cbc:ReferenceID>1</cbc:ReferenceID>
    <cbc:ResponseCode listAgencyID="320" listID="urn:oioubl:codelist:responsecode-1.1">
ProfileReject</cbc:ResponseCode>
    <cbc:Description>The profile "Procurement-BilSim-1.0" is not supported</cbc:Description>
  </cac:Response>
  <cac:DocumentReference>
    <cbc:ID>12347</cbc:ID>
    <cbc:CopyIndicator>false</cbc:CopyIndicator>
    <cbc:UUID>3a6252a4-8816-1029-857a-e388fe63f399</cbc:UUID>
    <cbc:IssueDate>2006-06-30</cbc:IssueDate>
    <cbc:DocumentTypeCode listAgencyID="320" listID="urn:oioubl:codelist:
responsedocumenttypecode-1.1">Reminder</cbc:DocumentTypeCode>
  </cac:DocumentReference>
</cac:DocumentResponse>
```

4.4 BusinessAccept

This example shows the response for receipt of an Invoice which is sent with the ProfileID "Procurement-BilSim-1.0".

```
<cac:ProfileID schemeAgencyID="320" schemeID="urn:oioubl:id:profileid-1.1">
  Procurement-BilSimR-1.0
</cac:ProfileID>
....
<cac:DocumentResponse>
  <cac:Response>
    <cbc:ReferenceID>1</cbc:ReferenceID>
    <cbc:ResponseCode listAgencyID="320" listID="urn:oioubl:codelist:responsecode-1.1">
BusinessAccept</cbc:ResponseCode>
    <cbc:Description>The document is received and accepted</cbc:Description>
  </cac:Response>
  <cac:DocumentReference>
```

```

    <cbc:ID>12348</cbc:ID>
    <cbc:CopyIndicator>false</cbc:CopyIndicator>
    <cbc:UUID>3a6252a4-8816-1029-857a-e388fe63f399</cbc:UUID>
    <cbc:IssueDate>2006-06-30</cbc:IssueDate>
    <cbc:DocumentTypeCode listAgencyID="320" listID="urn:oioubl:codelist:
    responsedocumenttypecode-1.1">Invoice</cbc:DocumentTypeCode>
  </cac:DocumentReference>
</cac:DocumentResponse>

```

4.5 BusinessReject

This example shows an Invoice which is rejected due to business-related reasons, because the too much is invoiced in invoice line 2 than was agreed by contract. As a consequence the entire Invoice is rejected.

```

<cac:ProfileID schemeAgencyID="320" schemeID="urn:oioubl:id:profileid-1.1">
  Procurement-BilSim-1.0
</cac:ProfileID>
....
<cac:DocumentResponse>
  <cac:Response>
    <cbc:ReferenceID>1</cbc:ReferenceID>
    <cbc:ResponseCode listAgencyID="320" listID="urn:oioubl:codelist:responsecode-1.1">
      BusinessReject</cbc:ResponseCode>
    <cbc:Description>Invoice rejected</cbc:Description>
  </cac:Response>
  <cac:DocumentReference>
    <cbc:ID>12349</cbc:ID>
    <cbc:UUID>3a6252a4-8816-1029-857a-e388fe63f399</cbc:UUID>
    <cbc:IssueDate>2006-06-30</cbc:IssueDate>
    <cbc:DocumentTypeCode listAgencyID="320" listID="urn:oioubl:codelist:
    responsedocumenttypecode-1.1">Invoice</cbc:DocumentTypeCode>
  </cac:DocumentReference>
  <cac:LineResponse>
    <cac:LineReference>
      <cbc:LineID>1</cbc:LineID>
    </cac:LineReference>
    <cac:Response>
      <cbc:ReferenceID>1</cbc:ReferenceID>
      <cbc:ResponseCode listAgencyID="320" listID="urn:oioubl:codelist:
      lineresponsecode-1.1">BusinessReject</cbc:ResponseCode>
      <cbc:Description>The prices within our contract is DKK 10.00 and not DKK
      11.50</cbc:Description>
    </cac:Response>
  </cac:LineResponse>
</cac:DocumentResponse>

```

5. Relevant code lists

Code list:	Agency:	Urn:	Example value:
UBLVersionID			2.0
CustomizationID			OIOUBL-2.01
ProfileID	320	urn:oioubl:id:profileid-1.1	Procurement-OrdSim-BilSim-1.0
ResponseCode	320	urn:oioubl:codelist:responsecode-1.1	TechnicalReject
Line/ResponseCode	320	urn:oioubl:codelist:linerresponsecode-1.1	BusinessReject

6. Terms and abbreviations

Listed below are the most important terms and abbreviations:

Term:	Explanation:
Header 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, contrary to field at header level, only apply to the specific document line
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.