Specification

OpenPEPPOL AISBL

Transport Infrastructure Coordinating Community

ICT - Models

openPEPPOL Business Message Envelope (SBDH)

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1.1 Introduction

The openPEPPOL Message Envelope is a customization of the UN/CEFACT Standard Business Document Header (SBDH). The customization represents a true subset of the standard XML Schemas and any instance conformant to this specification is also conformant to the SBDH.

The openPEPPOL Message Envelope makes it possible for Access points to:

- Route messages without having to access to the business message/data
- Always use the same way of identifying sender/receiver and document type
- Overcome issues with namespace or versioning of the payload

The Message Envelope can also carry some of the infrastructure elements when using protocols like AS2. The creation of the Message Envelope may be done already in the system issuing the business document but it may also be created by a service provider who is preparing the document for transportation to the receiver's Access Point. This specification does not recommend any particular setup with regard to this.

1.2 When to use the envelope

Unless other policies are decided for the PEPPOL infrastructure, the following principals describe when the envelope is to be applied.

- Business Message Envelope MUST be applied for all messages exchanged with AS2
- Business Message Envelope MUST NOT be applied for messages exchanged with START unless explicitly required by the relevant BIS-specification.

1.3 Party identifiers

The required Receiver party identifier in the Message Envelope header is the one that corresponds to a PEPPOL Participant registered in the SML/SMP. Also the Sender party identifier is required. The structure of the identifier MUST follow the "PEPPOL Policy for use of Identifiers".

```xml
<Sender>
        <Identifier Authority="iso6523-actorid-upis">0088:7315458756324</Identifier>
</Sender>
<Receiver>
        <Identifier Authority="iso6523-actorid-upis">0088:4562458856624</Identifier>
</Receiver>
```
Example

1.4 XML considerations

Since the envelope and included business document becomes one single XML instance, both the envelope and the business document MUST have the same character encoding. The included business document MUST be well-formed. The Message Envelope MUST NOT contain another Message Envelope.

1.5   PEPPOL Process ID and Document ID

The values of Process ID and Document ID are necessary in the SML/SMP discovery process to retrieve the relevant service metadata. Both values should be mapped to the element located *StandardBusinessDocument/StandardBusinessDocumentHeader/BusinessScope/Scope/InstanceIdentifier*

The qualifier

/StandardBusinessDocument/StandardBusinessDocumentHeader/BusinessScope/Scope/Type is used to distinquish the meaning of the values by using codes: **DOCUMENTID** and **PROCESSID.**

```xml
<BusinessScope>
        <Scope>
                <Type>DOCUMENTID</Type>
                <InstanceIdentifier>urn:oasis:names:specification:ubl:schema:xsd:Invoice-2::Invoice##
urn:www.cenbii.eu:transaction:biitrns010:ver2.0:extended:urn:www.peppol.eu:bis:peppol4a:ver2.0::2.1</InstanceIdentifier>
        </Scope>
        <Scope>
                <Type>PROCESSID</Type>
                <InstanceIdentifier>urn:www.cenbii.eu:profile:bii04:ver1.0</InstanceIdentifier>
        </Scope>
</BusinessScope>
```

Example

1.6   Message Envelope Schema

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Guideline

Element/Attribute	Annotation	
StandardBusinessDocument	Type	StandardBusinessDocument
└ xs:sequence	Occurence	1 .. 1
— **StandardBusinessDocumentHeader**	Occurence	1 ..
	Type	StandardBusinessDocumentHeader
└ xs:sequence	Occurence	1 .. 1
— **HeaderVersion**	Occurence	1 .. 1
	Type	xs:string
	Fixed	1.0
	Description	**Always value 1.0**
— **Sender**	Occurence	1 .. 1
	Type	Partner
└ xs:sequence	Occurence	1 .. 1
— **Identifier**	Occurence	1 .. 1
	Type	PartnerIdentification
	Description	**Use the format XXXX:AAAAAAAA where XXXX is the type of identifer (such as 0088 for GS1 GLN) and AAAAAAAA the actual identifier.**
— *Authority*	Type	xs:string
	Use	required
	Description	**Use fixed value "iso6523-actorid-upis"**
— **Receiver**	Occurence	1 .. 1
	Type	Partner
└ xs:sequence	Occurence	1 .. 1
— **Identifier**	Occurence	1 .. 1
	Type	PartnerIdentification
	Description	**Use the format XXXX:AAAAAAAA where XXXX is the type of identifer (such as 0088 for GS1 GLN) and AAAAAAAA the actual identifier.**
— *Authority*	Type	xs:string
	Use	required
	Description	**Use fixed value "iso6523-actorid-upis"**
— **DocumentIdentification**	Occurence	1 .. 1
	Type	DocumentIdentification
└ xs:sequence	Occurence	1 .. 1
— **Standard**	Occurence	1 .. 1
	Type	xs:string
	Description	**The standard of the enveloped business message, normally described by use of the XML namespace of the business message root element (such as urn:oasis:names:specification: ubl:schema:xsd:Order-2)**
— **TypeVersion**	Occurence	1 .. 1
	Type	xs:string
	Description	**The version number of the enveloped business message (such as the value "2.1" for OASIS UBL 2.1 or "2.0" for OASIS UBL 2.0)**
— **InstanceIdentifier**	Occurence	1 .. 1
	Type	xs:string
	Description	**An informative unique ID created by the issuer of the envelope. The InstanceIdentifier MUST be unique for each Business Message Envelope being created. This ID is not the same as the ID of the business message (such as the Invoice Number). It is not the same as a transmission Message ID generated by the application sending the message (as defined in AS2 or START).**
		The InstanceIdentifier MUST be globally unique and it is RECOMMENDED to use UUID (such as 118e3040-51d2-11e3-8f96-0800200c9a66)
— **Type**	Occurence	1 .. 1
	Type	xs:string
	Description	**Message type - mandatory in SBDH. XML local element name of the root-element in the business message.**

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Element/Attribute	Annotation	
└ **CreationDateAndTime**	Occurence	1 .. 1
	Type	xs:dateTime
	Description	**The date and time for when this envelope was created. It is NOT necessarily the same as the issue date of the business document (such as the invoice) being enveloped. It is NOT necessarily the date time for transmission.**
		The format of the value of this MUST include timezone information.
		Use this format for UTC: 2014-01-17T09:30:00Z (Where the "Z" indicates UTC) Or specify offset from UTC by adding the time difference: 2014-01-17T09:30:00+02:00 (Where +02:00 indicates 2 hours positive offset to UTC)
└ **BusinessScope**	Occurence	1 .. 1
	Type	BusinessScope
	Description	**Elements used to identify the ProcessID and DocumentID.**
└ xs:sequence	Occurence	1 .. 1
└ **Scope**	Occurence	2 .. unbounded
	Type	Scope
	Description	**Repeat twice - once for DocumentID once for ProcessID**
└ xs:sequence	Occurence	1 .. 1
└ ScopeAttributes		
└ xs:sequence	Occurence	1 .. 1
└ **Type**	Occurence	1 .. 1
	Type	xs:string
	Description	**Qualifier of how to understand the InstanceIdentifier element. Codes.**
	Applicable Codes	
	DOCUMENTID	
	PROCESSID	
└ **InstanceIdentifier**	Occurence	1 .. 1
	Type	xs:string
	Description	**The ProcessID (profile ID) or DocumentID corresponding to PEPPOL SMP for which the enveloped payload is intended to be used for. (the type of value is qualified by the ScopeAttributes/ Type element)**
	Description	**For senders - this value can be used to retrieve the correct set of PEPPOL service metadata.**
	Description	**For receivers - this value can be used to verify that the receiving PEPPOL Participant has published support for this DocumentID or ProcessID.**
└ **xs:any**	Occurence	1 .. 1
	Description	**Business message goes here!**

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1.7 Sample instance document

```xml
<?xml version="1.0" encoding="UTF-8"?>
<StandardBusinessDocument xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader">
        <StandardBusinessDocumentHeader>
                <HeaderVersion>1.0</HeaderVersion>
                <Sender>
                        <Identifier Authority="iso6523-actorid-
upis">0088:7315458756324</Identifier>
                </Sender>
                <Receiver>
                        <Identifier Authority="iso6523-actorid-
upis">0088:4562458856624</Identifier>
                </Receiver>
                <DocumentIdentification>
                        <Standard>urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2</Standard>
                        <TypeVersion>2.1</TypeVersion>
                        <InstanceIdentifier>123123</InstanceIdentifier>
                        <Type>Invoice</Type>
                        <CreationDateAndTime>2013-02-19T05:10:10Z</CreationDateAndTime>
                </DocumentIdentification>
                <BusinessScope>
                        <Scope>
                                <Type>DOCUMENTID</Type>

        <InstanceIdentifier>urn:oasis:names:specification:ubl:schema:xsd:Invoice-2::Invoice##
urn:www.cenbii.eu:transaction:biitrns010:ver2.0:extended:urn:www.peppol.eu:bis:peppol4a:ver2.0
::2.1</InstanceIdentifier>
                        </Scope>
                        <Scope>
                                <Type>PROCESSID</Type>

        <InstanceIdentifier>urn:www.cenbii.eu:profile:bii04:ver1.0</InstanceIdentifier>
                        </Scope>
                </BusinessScope>
        </StandardBusinessDocumentHeader>
        <Invoice
xmlns:cbc="urn:oasis:names:specification:ubl:schema:xsd:CommonBasicComponents-2"
xmlns:cac="urn:oasis:names:specification:ubl:schema:xsd:CommonAggregateComponents-2"
xmlns="urn:oasis:names:specification:ubl:schema:xsd:Invoice-2">
                <cbc:UBLVersionID>2.1</cbc:UBLVersionID>
                <cbc:CustomizationID schemeID="PEPPOL">
urn:www.cenbii.eu:transaction:biitrns010:ver2.0:extended:urn:www.peppol.eu:bis:peppol4a:ver2.0
</cbc:CustomizationID>
                <cbc:ProfileID>urn:www.cenbii.eu:profile:bii04:ver1.0</cbc:ProfileID>
                <cbc:ID>008660-AB</cbc:ID>
                <cbc:IssueDate>2011-05-10</cbc:IssueDate>
                <cbc:InvoiceTypeCode>380</cbc:InvoiceTypeCode>
<!-- reduced instance file -->
        </Invoice>
</StandardBusinessDocument>
```