


VDA	Transmission of Attachments and Signatures with EDIFACT Messages Annexe 1 + 2	4983
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Communications and Information Technologies Committee (AK KIT)		
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Annexe 1

Description of the XML Schema file of the Container

Element/Attribute	Annotation	
StandardBusinessDocument	Type	extension (cefact:StandardBusinessDocument)
	Remark	Header
xs:sequence	Occurrence	1 .. 1
cefact:StandardBusinessDocumentHeader	Occurrence	1 .. 1
	Type	cefact:StandardBusinessDocumentHeader
xs:sequence	Occurrence	1 .. 1
HeaderVersion	Occurrence	1 .. 1
	Type	xs:string
	Fixed	1.3
	Remark	Version
Sender	Occurrence	1 .. unbounded
	Type	cefact:Partner
	Remark	Sender of the interchange
xs:sequence	Occurrence	1 .. 1
Identifier	Occurrence	1 .. 1
	Type	cefact:PartnerIdentification
	Remark	Identifier of the sender as in EDIFACT UNB DE 0004
Receiver	Occurrence	1 .. unbounded
	Type	cefact:Partner
	Remark	Receiver of the interchange
xs:sequence	Occurrence	1 .. 1
Identifier	Occurrence	1 .. 1
	Type	cefact:PartnerIdentification
	Remark	Identification of the receiver as in EDIFACT UNB DE 0010
DocumentIdentification	Occurrence	1 .. 1
	Type	cefact:DocumentIdentification
	Remark	To Identify the documents in the container
xs:sequence	Occurrence	1 .. 1
Standard	Occurrence	1 .. 1
	Type	xs:string
	Remark	Used standard: EDIFACT
TypeVersion	Occurrence	1 .. 1
	Type	xs:string
	Remark	EDIFACT directory in format D.##X, e.g. D.07A
InstanceIdentifier	Occurrence	1 .. 1
	Type	xs:string
	Remark	Identifies the data interchange as in UNB DE 0020
Type	Occurrence	1 .. 1
	Type	xs:string
	Remark	Message Type, e.g. INVOIC or ORDERS - see EDIFACT code list DE 0065
CreationDateAndTime	Occurrence	1 .. 1
	Type	xs:dateTime
	Remark	Timestamp of the interchange file: format CCYY-MM-DDThh:mm:ss, optional offset to UTC, example: 2011-09-01T12:10:10
Manifest	Occurrence	1 .. 1
	Type	cefact:Manifest
	Remark	Table of contents of the container
xs:sequence	Occurrence	1 .. 1
NumberOfItems	Occurrence	1 .. 1
	Type	xs:integer
	FractionDigits	0
	Remark	Number of enclosed files including the EDIFACT file
ManifestItem	Occurrence	1 .. unbounded
	Type	cefact:ManifestItem

Element/Attribute	Annotation
	Remark Characterises the individual enclosed parts in the sequence at the files are enclosed in the container.
xs:sequence MimeTypeQualifierCode	Occurrence 1 .. 1 Occurrence 1 .. 1 Type cefact:MimeTypeQualifier Remark File type according to RFC 2046 and the available updates
UniformResourceIdentifier	Occurrence 1 .. 1 Type xs:anyURI Remark To specify the file name of the enclosed object without path but including the extension; examples: message.edi, attachment.pdf, calculation.xls.
xs:any	Occurrence 1 .. 1 Remark xs:any is replaced by Attachment and or Signature
xs:sequence Attachment	Occurrence 1 .. 1 Occurrence 0 .. unbounded Type ds:ObjectType
<i>Id</i>	Type xs:ID Use optional Pattern [i-:]][\c-:]]* WhiteSpace collapse Remark The identifier of the attachment.
<i>MimeType</i>	Type xs:string Use optional Remark Type of the file according to RFC 2046 and the relevant updates. It is recommended to use the codes according to data type Binary Object of UN/CEFACT Core Component Library 10A (see extra code list). If used, the content of this element must match the content of the relevant manifest item.
<i>Encoding</i>	Type xs:anyURI Fixed http://www.w3.org/2000/09/xmldsig#base64 Use optional Remark Fixed "http://www.w3.org/2000/09/xmldsig#base64"
ds:Signature	Occurrence 0 .. 1 Type ds:SignatureType
<i>Id</i>	Type xs:ID Use optional Pattern [i-:]][\c-:]]* WhiteSpace collapse
sequence ds:SignedInfo	Occurrence 1 .. 1 Occurrence 1 .. 1 Type ds:SignedInfoType
<i>Id</i>	Type xs:ID Use optional Pattern [i-:]][\c-:]]* WhiteSpace collapse
sequence ds:CanonicalizationMethod	Occurrence 1 .. 1 Occurrence 1 .. 1 Type ds:CanonicalizationMethodType Remark Algorithm according to http://www.w3.org/TR/2001/REC-xml-c14n-20010315
<i>Algorithm</i>	Type xs:anyURI Use required Remark Algorithm according to http://www.w3.org/TR/2001/REC-xml-c14n-20010315
sequence any	Occurrence 1 .. 1 Occurrence 0 .. unbounded

Element/Attribute	Annotation
ds:SignatureMethod	Occurrence 1 .. 1 Type ds:SignatureMethodType
Algorithm	Type xs:anyURI Use required Remark Algorithm, coded according to RFC 405,1 e.g. http://www.w3.org/2001/04/xmldsig-more#rsa-sha256
ds:Reference	Occurrence 1 .. unbounded Type ds:ReferenceType
Id	Type xs:ID Use optional Pattern <code>[i-:]][\c-:]]*</code> WhiteSpace collapse
URI	Type xs:anyURI Use optional
Type	Type xs:anyURI Use optional
sequence	Occurrence 1 .. 1
ds:Transforms	Occurrence 0 .. 1 Type ds:TransformsType
sequence	Occurrence 1 .. 1
ds:Transform	Occurrence 1 .. unbounded Type ds:TransformType
Algorithm	Type xs:anyURI Use required Remark Algorithm acc. to W3C Standard Canonical XML: http://www.w3.org/TR/2001/REC-xml-c14n-20010315
ds:DigestMethod	Occurrence 1 .. 1 Type ds:DigestMethodType Remark Method to calculate the check sum
Algorithm	Type xs:anyURI Use required Remark Algorithm according to W3C XML Encryption Syntax and Processing, e.g. XML Encryption Syntax and Processing " http://www.w3.org/2001/04/xmlenc#sha256 "
ds:DigestValue	Occurrence 1 .. 1 Type ds:DigestValueType Remark Check sum
ds:SignatureValue	Occurrence 1 .. 1 Type ds:SignatureValueType Remark Signature
ds:KeyInfo	Occurrence 0 .. 1 Type ds:KeyInfoType Remark Information regarding the used certificate. Certificates according ITU standard X.509 are used.
Id	Type xs:ID Use optional Pattern <code>[i-:]][\c-:]]*</code> WhiteSpace collapse
choice	Occurrence 1 .. unbounded
ds:X509Data	Occurrence 1 .. 1 Type ds:X509DataType
sequence	Occurrence 1 .. unbounded
choice	Occurrence 1 .. 1
X509IssuerSerial	Occurrence 1 .. 1 Type ds:X509IssuerSerialType Remark Serial number of the certificate
sequence	Occurrence 1 .. 1

Element/Attribute		Annotation	
<div> <div></div> <div> <div>X509IssuerName</div> <div>X509SerialNumber</div> <div>X509SKI</div> <div>X509SubjectName</div> <div>X509Certificate</div> <div>X509CRL</div> <div>ds:Object</div> <div>Id</div> <div>MimeType</div> <div>Encoding</div> <div>sequence</div> <div>any</div> </div> </div>	X509IssuerName	Occurrence	1 .. 1
		Type	xs:string
	X509SerialNumber	Occurrence	1 .. 1
		Type	xs:integer
		FractionDigits	0
	X509SKI	Occurrence	1 .. 1
		Type	xs:base64Binary
	X509SubjectName	Occurrence	1 .. 1
		Type	xs:string
		Remark	Subject name of the certificate
	X509Certificate	Occurrence	1 .. 1
		Type	xs:base64Binary
		Remark	Content of the certificate
	X509CRL	Occurrence	1 .. 1
		Type	xs:base64Binary
		Remark	Information on the certificate revocation list.
	ds:Object	Occurrence	0 .. unbounded
		Type	ds:ObjectType
		Remark	If necessary, used for additional information, e.g. according to XML Advanced Electronic Signature extension of the XML DSig to comply with EU directive 1999/93/EC
	Id	Type	xs:ID
		Use	optional
		Pattern	[i-:][\c-:]]*
		WhiteSpace	collapse
	MimeType	Type	xs:string
		Use	optional
	Encoding	Type	xs:anyURI
		Use	optional
	sequence	Occurrence	0 .. unbounded
	any	Occurrence	1 .. 1

Annexe 2

Example XML Container

```
<?xml version="1.0" encoding="UTF-8"?>
<StandardBusinessDocument
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns="www.vda.de/sbdh"
  xmlns:cefact="http://www.unece.org/cefact/namespaces/StandardBusinessDocumentHeader"
  xmlns:ds="http://www.w3.org/2000/09/xmldsig"
  xmlns:mime="http://www.w3.org/2005/05/xmlmime"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="www.vda.de/sbdh file:///D:/VDA/StandardBusinessDocumentHeader1p3.xsd">
  <cefact:StandardBusinessDocumentHeader>
    <cefact:HeaderVersion>1.3</cefact:HeaderVersion>
    <cefact:Sender>
      <cefact:Identifier>001770000000000000x123</cefact:Identifier>
    </cefact:Sender>
    <cefact:Receiver>
      <cefact:Identifier>001770000000000000x456</cefact:Identifier>
    </cefact:Receiver>
    <cefact:DocumentIdentification>
      <cefact:Standard>EDIFACT</cefact:Standard>
      <cefact:TypeVersion>D.07A</cefact:TypeVersion>
      <cefact:InstanceIdentifier>2011-09-05T11:47_001</cefact:InstanceIdentifier>
      <cefact:Type>INVOIC</cefact:Type>
      <cefact:CreationDateAndTime>2011-09-01T12:10:10</cefact:CreationDateAndTime>
    </cefact:DocumentIdentification>
    <cefact:Manifest>
      <cefact:NumberOfItems>3</cefact:NumberOfItems>
      <cefact:ManifestItem>
        <cefact:MimeTypeQualifierCode>application/EDIFACT</cefact:MimeTypeQualifierCode>
        <cefact:UniformResourceIdentifier>_1_Rechnung_12345.EDI
      </cefact:UniformResourceIdentifier>
      </cefact:ManifestItem>
      <cefact:ManifestItem>
        <cefact:MimeTypeQualifierCode>application/pdf</cefact:MimeTypeQualifierCode>
        <cefact:UniformResourceIdentifier>_2_Reisekostenabrechnung.pdf
      </cefact:UniformResourceIdentifier>
      </cefact:ManifestItem>
      <cefact:ManifestItem>
        <cefact:MimeTypeQualifierCode>application/vnd.openxmlformats-officedocument.spreadsheetml.sheet</cefact:MimeTypeQualifierCode>
        <cefact:UniformResourceIdentifier>_3_Stundenliste-2011-09.xlsx
      </cefact:UniformResourceIdentifier>
      </cefact:ManifestItem>
    </cefact:Manifest>
  </cefact:StandardBusinessDocumentHeader>
  <!-- EDIFACT Nachricht -->
  <Attachment Encoding="http://www.w3.org/2000/09/xmldsig#base64" Id="ID_1"
    MimeType="application/EDIFACT">VU5B0isuPyAnVU5Q2NT
  ... shortened ...
  </Attachment>
  <!-- PDF Datei -->
  <Attachment Encoding="http://www.w3.org/2000/09/xmldsig#base64" Id="ID_2"
    MimeType="application/pdf">
    JVBERi0xLjUNCiwlbtbw1DQoxIDAgb2Jq
  ... gekürzt ...
  </Attachment>
  <!-- Excel Datei -->
  <Attachment Encoding="http://www.w3.org/2000/09/xmldsig#base64" Id="ID_3"
    MimeType="application/vnd.openxmlformats-officedocument.spreadsheetml.sheet">
    UESDBBQABgAIAAAA
  ... shortened ...
  </Attachment>
  <!-- optional signature -->
  <ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
    Id="XMLSignature_20111124124612Z_sETXiGGPpEvFyxvh6F8H1JB8RGtxMcX3av9Qpmdww">
    <ds:SignedInfo>
      <ds:CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
      <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
      <ds:Reference URI="">
```

```

    <ds:Transforms>
    <ds:Transform xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
    <ds:Transform xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
Algorithm="http://www.w3.org/TR/2001/REC-xm1-c14n-20010315"/>
    </ds:Transforms>
    <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xm1enc#sha256"/>
    <ds:DigestValue>SETXiGGPPEvFyXvh6F8H1JB8RGtxM+cX3av9Q/pmdww=</ds:DigestValue>
    </ds:Reference>
    <ds:Reference
URI="#SignTime_XMLSignature_20110124124612Z_SETXiGGPPEvFyXvh6F8H1JB8RGtxMcX3av9Qpmd
Ww">
    <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xm1enc#sha256"/>
    <ds:DigestValue>XPSNBeuDY6SNwdw9M3u35EBbPZACXPEFOSdr+XuQfiU=</ds:DigestValue>
    </ds:Reference>
    </ds:SignedInfo>

<ds:SignatureValue>BPIwdne1MDbeoIbU+o7SE+VekJRPa7S3PN10ynfLaYEJFbWRNTANM1En1e+2awQu
bIp5rw3qkrK6
QGAdos2H7puFa4MwkaSw/sAvfjo/rfMw8Yf2KIHaEz2VGHf1C1AObfbNYQS0FeGhHfSSBg09Ftwz
PLNRFxbYz7xIZR5bOKPM0dweYsgwIvqn7SzvPwza5Ed8NjgDUp2NmIe6jpoWlGPq32F5nzTZHhcV
C9GRiwwhrqJSVqDA8Thw99arOLtdGT2sBFRpSA33Ttm9Xha4WIMGHiNhI4/Z8C5ZEG33UUXe2oG0
fsR9I9rvaEpdemASzPSHI7Qh7c5a9Al0xs1X6A==</ds:SignatureValue>

    <ds:KeyInfo>
    <ds:X509Data>
    <ds:X509Certificate>
MIIF8jCCA9qgAwIBAgIKFk9CzWAAAAABFZANBgkqhkiG9w0BAQUFADBNMQswCQYDVQQGEWJHqjEi
MCAGA1UEChMZT0RFVFRFIEludGvYbmF0aw9uYywwgTHRkLjEaMBGGA1UEAxMRT0RFVFRFIElzc3Vp
bmcgQ0EwHhcNMTAwODI2MDYyNTU0WhcNMTIwODI2MDYyNTU0WjCB1zELMAkGA1UEBhMCROIXDZAN
BgnVBACTBkxvbmRvbGJlMCAGA1UEChMZT2RldHRlIEludGvYbmF0aw9uYywwgTHRkLjEaMBGGA1UE
CxMQQ2VudHJhbCBPZmZpY2UxYjAUBG9NBAMTDUpvZXJnIFdhbHROZXIxIjAgBgkqhkiG9w0BCQEW
E2p3Yxw0aGVyQG9kZXR0ZS5vcmcwggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQCebn1M
jdmf+7s7zJiSMfyIbpTDCBS5cXZ9VJvnquDfytv2XIOTL2er2AwMNzXj4055Zn0xvUNQ8Ba8fyXF
bomkqFxA00YupXxNFUJFuNFBj+dofAlpkOTOP+ODjDvRaQsZYq/cUVX/ACEGfGgKDSvxASXodQ1
Q7HsXHSGwPrXLyn50D44FYSFR6ufZTFmkhcmz8/y84i8Wj4y0/w0ElqmI13edo9k6HmT7fw9J8Rx
ScdId3GHIiGwVYe2CzChpJepWlyL6X9wu0uhFPMixYdeO5tQ6mZ4KrcWswiMyp5i3QM5vniv2
IFG3pPlV830MainUMC1Cy2wpf5wc5sdPagMBAAGjggGHMIIbGzAdBgNVHQ4EFgQUdGrWAIhw9T
sfy+LdI7qJR54nAwDgYDVROPAQH/BAQDAgwgMB8GA1UdIwQYMBaAFPSu+3JhEvuxziuf9veug+hZr
nKrIMGMGA1UdHwRCMFowWKBWofSGumh0dHA6Ly93d3cub2RldHRlY2EuY29tL1JlCG9zaXRvcnkx
T0RFVFRFJTlWSXNzdWluZyUyMENBL09ERVURSUyMElzc3VpbmclmjbDQs5jcmwwbgYIKwYBBQUH
AQEEYjBGMF4GCCSGAQUFBzAch1JodHRwoi8vd3d3Lm9kZXR0ZWNhLmNvbS9S5ZXBvc210b3J5L09E
RVRURSUyMElzc3VpbmclmjbDQs5PREVUVEUlmjbJc3N1aw5nJTIwQ0EuY3J0MCCGA1UdJQgMBG4G
C5GAQUFBwMCBggRFBGEBQCDATAKBggrBgEBQCDDBANBgkqhkiG9w0BAQUFAAOCAQEA5diNU3sQIMxR2bP
ttL5j8B3Nmez19tNance9CIwiVeZ7SY1bANTZ7Bwxrvv+EPCH+ZGQyNk742w104Ay66JWWNeocmz4
+PHL5N7+q4moxwVQqfOJofjnrq3z0Wzn/uLoTcPr11jmaxPX69BdRs71SrPanRs+wkF+mJ5QvUE
MKoYRAB6PCW1U5R4AJrkfv809bB207Yw9mhG3ehI3Tj+T+u7ZoYqq3XZ7C5MwEgi7YUo2Nvrh9TK
1DWGX50gtlPlCIOZw+vI6hT7mZSsoyZVunPlw4uhownwAAQ82KtBliehuMpaL+BqT5fCBg6d97X5
jASHANuXTj+j2VvYPH30zxhe8nyFtrfAwYlfdnnemwu4NpGJnzEzxKqmpAccmL3M4PA71HP9SRa
FJuTeZrYu6gNnA9CbzL1m8NCmYQCFia9u49QNQ93jCVva+ipJ2hdvJV6Tsohcj/pmyEdZJomYITE
I4Kc/LySoZ0LF4DwruGukIwxFTFMM4uhj2bf0DGa20QvgAENw0pxJjjRBxAP0J/FSusDp14X/wN4
gtbYEdz1lkb8S26wy+K352xEFzrsm9V2puqMNDYjbsdE1ws8UT1QmnOkrikxv6Q70/aR/d5h3IB6
JxFXSwwsNoIjxDwVQqHd6bkgK0CBE7Cc3mvs3b21bFP42KL3Vz1mAts+vHI=</ds:X509Certificate>
    </ds:X509Data>
    <ds:KeyInfo>
    <ds:Object>
    <xades:QualifyingProperties xmlns:xades="http://uri.etsi.org/01903/v1.1.1#"
Target="#XMLSignature_20110124124612Z_SETXiGGPPEvFyXvh6F8H1JB8RGtxMcX3av9Qpmdww">
    <xades:SignedProperties xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
xmlns:xades="http://uri.etsi.org/01903/v1.1.1#"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
Id="SignTime_XMLSignature_20111124124612Z_SETXiGGPPEvFyXvh6F8H1JB8RGtxMcX3av9Qpmdww
">
    <xades:SignedSignatureProperties>
    <xades:SigningTime>2011-11-24T12:46:12Z</xades:SigningTime>
    <xades:SigningCertificate>
    <xades:Cert>
    <xades:CertDigest>
    <ds:DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
    <ds:DigestValue>6GJ4JyQ6MoRyyxnB0iFxFK4C1mw=</ds:DigestValue>
    </xades:CertDigest>
    <ds:IssuerSerial>
    <ds:X509IssuerName>C=GB,O=ODETTE International Ltd.,CN=ODETTE Issuing
CA</ds:X509IssuerName>
    <ds:X509SerialNumber>105356042968926917755159</ds:X509SerialNumber>
    </ds:IssuerSerial>
    </xades:Cert>
    </xades:SigningCertificate>
    <xades:SignaturePolicyIdentifier>

```

```
<xades:SignaturePolicyImplied/>
</xades:SignaturePolicyIdentifier>
</xades:SignedSignatureProperties>
</xades:SignedProperties>
</xades:QualifyingProperties>
</ds:Object>
</ds:Signature>
</StandardBusinessDocument>
```