papiNet Envelope – Version 1.0

The papiNet Standard

Documentation

Global Standard for the Paper and Forest Products Supply Chain

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Interoperability and the papiNet Envelope

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papiNet Envelope Version 1.0
The papiNet Standard

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Envelope Documentation

Envelope Introduction

The papiNet envelope is a light-weight wrapper that provides a common starting point for message services wishing to parse a document. Both papiNet e-Documents and other XML documents can be wrapped into the papiNetEnvelope. An Attachment to the document can also be supplied in the Payload of the papiNetEnvelope. The papiNet envelope does not replace the message service envelope but works in concert with all message service envelopes to expose business routing and identification information.

Interoperability Vision

The papiNet Standards Group has the vision of enterprises of any size and in any geographical location meeting and conducting the business of paper, printing, and publishing with each other through the exchange of XML based e-business documents. The intent is to define a neutral method (one that is open and non proprietary) for exchanging these electronic business documents. In addition to being neutral the exchange process has to guarantee safe, secure delivery.

This interoperability vision can be summarized in the following way:

- Participants in the messaging transfer process should be able to choose the technology they desire to use to communicate messages independent of other participants in the communications network.
- Errors in transmission to the destination must be communicated.
- Security must be assured:

  - Privacy - Protect against information being disclosed or revealed to any entity not authorized to have that information by permitting the use of encryption techniques.
  - Authentication - Authenticate the claimed identity of the originator.
  - Authorization - Protect against the threat that unknown entities enter into the system and ensures that an entity performs only authorized actions within the system.
  - Integrity - Protect against the threat that the value of a data item might be changed en route.
  - Non-repudiation - Protect against one party to a transaction or communication later falsely denying that the transaction or communication occurred.

Aspects of Interoperability

When we talk about e-business document communication there are many aspects to consider. The process starts with an individual reviewing the output from a business application and initiating some sort of action that can be communicated using a papiNet e-business document.

The papiNet e-business document is sent from your location to the recipient's location over the internet via one of several possible transfer methods. The payload is wrapped in an electronic envelope that provides identification and supports security features.
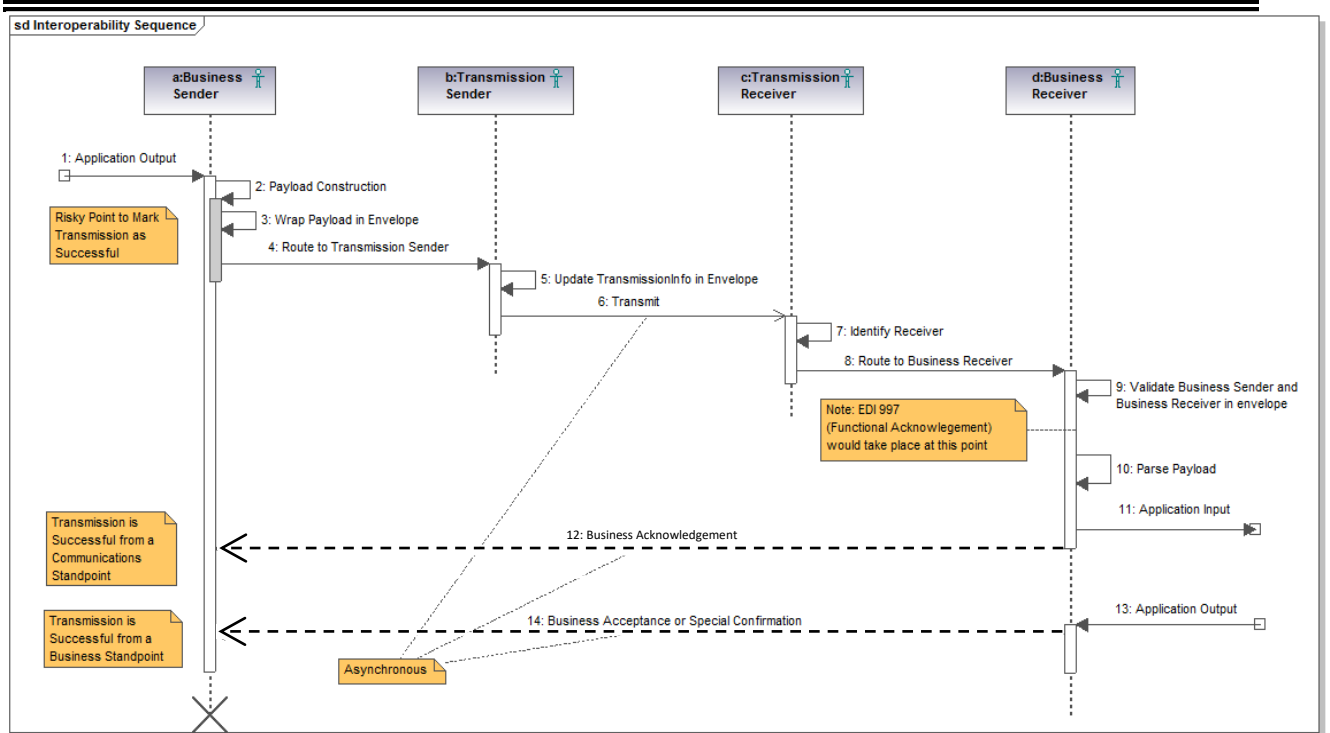
The papiNet Payload

In the diagram above the papiNet e-business document, the papiNet payload, is created in Step 2, read in Step 10, and processed in Step 11. The standardised format of the papiNet payload provides a common view of the business document across trading partner boundaries.

The papiNet Envelope

The papiNet Standards Committee has found that there is a consistent group of information that is beneficial for XML processing programs to have readily available. Grouping this information into an envelope that contains the papiNet payload means that this information is always in the same location and provides a hook for the XML processing programs to use when processing a transmission.

Message Service and Transport Protocol Envelopes

We'll cover these two items together because, in many cases, the transport protocol envelope and the message service envelope are so closely related that it is hard to distinguish them.

In the papiNet world we deal with the HTTP, FTP, and SMTP transport protocols. From an allegorical standpoint you could think of the transport protocols in the following way:

- SMTP – as secure as your postal mail and with the same issue of junk mail.
- FTP – a package delivery service that delivers the package to your front door step but does not wait for someone to provide a signature of receipt. Sometimes they ring the doorbell. You can secure your front door step but you cannot ensure that a receipt is provided.
- HTTP/HTTPS – (think of HTTPS as an armoured car delivery) Depending on the nature of the message service you use HTTP can be implemented so that it provides delivery similar to a personal high-security courier who personally delivers the message to you, provides the security cipher, and

guarantees that the message has not been tampered with and is from the party indicated. You can also run HTTP/HTTPS in such a way that it provides the same lower level of capability as with SMTP or FTP.

In the HTTP/HTTPS transport protocol environment there are several message protocols that you need to be aware of. They are SOAP, AS2, and SOAP-ebXML. The level of functionality provided by the HTTP/HTTPS requires more coordination between the sender and recipient than is required by SMTP and FTP.

The Need for Coordination between Trading Partners

When two trading partners decide to exchange electronic business documents they must agree on the parameters for the exchange. Be aware that all communication and all messages do not need to be sent in the same way between all trading partners. You could be receiving messages in one form from a trading partner and sending them in another form. However, both of you must at least agree that you will be "looking out" for messages of a certain type.

Most companies like to reduce the complexity of their infrastructure by reducing the number of communications approaches they have to support. There are two competing factors that prevent a single uniform approach for all companies.

- First, there is the drive to the "lowest common denominator" which would be the solution that is easiest and cheapest to implement. Depending on who you are this could be email, ftp, phone, or fax.
- Secondly, there is the drive to the "highest level of security" which would be the HTTP/HTTPS with AS2, SOAP, or ebXML.

So, coordination is required between two trading partners. The first time you set-up your environment for one of the more robust solutions there will be some initial steps that you need to perform. These will be mostly one-time steps that will applicable for subsequent implementations.

Selecting the Proper Environment

The number one or two question that we are continually asked is, "What message service should I use when communicating with my trading partners?" The answer depends on many different factors.

In order to achieve the security considerations mentioned at the beginning of this document our first recommendation is always going to be one of the HTTP oriented protocols. However, if security is less of a concern then other choices may be possible.

- Are you a large company, a medium sized company, or a small company?

  Security considerations aside, a small company may feel very comfortable in using SMTP (e-mail) to send papiNet messages. In general, most medium and large companies use one of the HTTP oriented protocols. FTP is used by some medium and large companies as it provides a bit more reliability and security than e-mail however; it is not as robust as the HTTP oriented protocols.

- What are your trading partners doing? What are your customers requiring?

This point gets to the coordination that is required between the sender and receiver and the amount of investment that is required to implement any solution. Obviously you do not want to implement a solution that does not meet your security requirements but all the approaches require a degree of coordination.

- How sensitive is the information you are communicating?

  While all the approaches provide a certain degree of security SMTP provides the lowest and HTTPS with AS2, SOAP, or ebXML provides the highest. Of course the coordination requirements are more extensive with AS2, SOAP, or ebXML.

papiNet XML Business Document Creation

Creating Well-formed papiNet XML

This document reviews a typical XML document, the sample XML that immediately follows. You might want to place this discussion next to the sample XML so that you can follow the discussion item-by-item.

Item 1:
The required XML element with attributes for version and encoding is the first line of the XML document. While there are several encoding approaches UTF-8 is the approach that is prescribed by the Internet Engineering Task Force (IETF). UTF-8 can handle every character, pictograph languages may take up more space but they can be represented.

Item 2:
The root element of the papiNet envelope (papiNetEnvelope) is shown on item 2. If you scan down to item 40 you will find a second "root element". The second root element is the root element of the papiNet payload, the business document, which is in this case, "DeliveryMessage". These root element share many characteristics, we'll cover them when we discuss items 3, 4 and 5. A similar discussion will take place with the DeliveryMessage root element. Note that item 2 starts with "<" and that a closing ">" does not show until item 5. Item 2 is an element and the entries on items 3, 4 and 5 are attributes.

Item 3:
Item 3 indicates that a namespace (without a prefix) is being defined. By looking at the attribute value you should be able to determine that this is the namespace for the papiNet envelope.

Item 4:
Another namespace, this one with the prefix of "xsi" is being defined.

Item 5:
The namespace of "xsi" is used along with one of its attributes to communicate the location for the schema. The value of the xsi:schemaLocation (what's between the quotation marks) is entries. In programming terminology this would be a name-value pair separated by a space character. The first entry is the name, which in this case is a namespace, and is the namespace that we defined on item 3. The second entry is the value, which in this case is a location on the internet, and is the location where papiNet stores the schema for the papiNetEnvelope. Unfortunately, to the uninitiated, the name and the value are extremely confusing because while it is easy to understand that the schema location (the value) would be a location on the internet it is very confusing as to why a namespace would look like a location on the internet. The reason why many namespaces look like web-addresses is because web-addresses are associated with domain names and domains names are a very easy way to ensure uniqueness and control (there are other ways, as well).

While this example shows the use of the xsi:schemaLocation attribute you can still choose to use a schema stored at a different location. This is common practice in a production environment where you want to use a locally stored version (refer to Use Case Section). Regardless, it is strongly recommended by papiNet to include a schemaLocation in your XML document.

Item 6 through 39 and 92 through 94:
The papiNetEnvelope structure. The closing elements of the envelope are

shown on itemss 92, 93 and 94, thus the envelope "wraps around" the papiNet payload (the BusinessDocument or, in this case, a DeliveryMessage).

Item 40 through 91:

The papiNet payload, the BusinessDocument section, or in this case a DeliveryMessage.

Item 41 through 43:

The namespace and schemaLocation for the DeliveryMessage is shown in these items.

Item 41 indicates that this DeliveryMessage lies in the v2r40 namespace which is managed by papiNet. The manner in which this namespace is applied to the document means that this namespace definition applies to those items between lines 40 and 91 (replacing the envelope namespace). The reason this happens is because the namespace is specified on an element.

Sample XML - Document in Envelope

N.B. The BusinessDocument DeliveryMessage is not fully populated.

```xml
1.  <?xml version="1.0" encoding="UTF-8"?>
2.  <papiNetEnvelope
3.      xmlns="http://www.papinet.org/env/v1r00"
4.      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5.      xsi:schemaLocation="http://www.papinet.org/env/v1r00
               http://www.papinet.org/env/v1r00/papiNetEnvelope.xsd">
6.    <PayloadInfo TestFlag="false">
7.     <TransmissionInfo>
8.       <SequenceNumber>0</SequenceNumber>
9.       <ID>12345678</ID>
10.      <TimeStamp>2006-02-03T15:00:00+01:00</TimeStamp>
11.      <TransmissionSender>
12.        <PartyIdentifier PartyIdentifierType="papiNetGlobalPartyIdentifier">
                  1.3.6.1.4.1.13099</PartyIdentifier>
13.      </TransmissionSender>
14.      <TransmissionReceiver>
15.        <PartyIdentifier PartyIdentifierType="DunsNumber">
                  14-315-8939</PartyIdentifier>
16.      </TransmissionReceiver>
17.     </TransmissionInfo>
18.     <BusinessSender>
19.       <PartyIdentifier PartyIdentifierType="papiNetGlobalPartyIdentifier">
                  1.3.6.1.4.1.14100</PartyIdentifier>
20.     </BusinessSender>
21.     <BusinessReceiver>
22.       <PartyIdentifier PartyIdentifierType="DunsNumber">
                  15-415-9939</PartyIdentifier>
23.     </BusinessReceiver>
24.     <Document DocumentName="DeliveryMessage" DocumentType="DeliveryMessage">
25.       <DocumentNumber>DM1002456</DocumentNumber>
26.       <DocumentDate>
27.         <Date>
```

```
28.        <Year>2006</Year>
29.        <Month>2</Month>
30.        <Day>3</Day>
31.      </Date>
32.      <Time>14:59:55+01:00</Time>
33.    </DocumentDate>
34.  </Document>
35.  <NumberOfAttachments>0</NumberOfAttachments>
36.  <Schema Version="V2R40">DeliveryMessageV2R40.xsd</Schema>
37. </PayloadInfo>
38. <Payload>
39.  <BusinessDocument>
40.   <DeliveryMessage
41.        xmlns="http://www.papinet.org/v2r40"
42.        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
43.        xsi:schemaLocation="http://www.papinet.org/v2r40
                      http://www.papinet.org/v2r40/DeliveryMessageV2R40.xsd"
44.        DeliveryMessageStatusType="Original"
45.        DeliveryMessageType="DeliveryMessage">
46.     <DeliveryMessageHeader>
47.       <DeliveryMessageNumber>DM1002456</DeliveryMessageNumber>
48.       <DeliveryMessageDate>
49.         <Date>
50.           <Year>2006</Year>
51.           <Month>2</Month>
52.           <Day>3</Day>
53.         </Date>
54.         <Time>14:59:55+01:00</Time>
55.       </DeliveryMessageDate>
56.       <SenderParty PartyType="Supplier">
57.         <PartyIdentifier PartyIdentifierType="papiNetGlobalPartyIdentifier">
                      1.3.6.1.4.1.14100</PartyIdentifier>
58.         <NameAddress>
59.          <Name1>mySupplierName</Name1>
60.         </NameAddress>
61.       </SenderParty>
62.       <ShipToCharacteristics>
63.         <ShipToParty PartyType="Buyer">
64.         <PartyIdentifier PartyIdentifierType="DunsNumber">
                        15-415-9939</PartyIdentifier>
65.           <NameAddress>
66.              <Name1>myBuyerName</Name1>
67.            </NameAddress>
68.          </ShipToParty>
69.       </ShipToCharacteristics>
70.       <DeliveryLeg>
71.         <DeliveryLegSequenceNumber>1</DeliveryLegSequenceNumber>
72.         <DeliveryOrigin>
```

```
73.                        <LocationParty PartyType="Supplier">
74.                          <PartyIdentifier PartyIdentifierType="papiNetGlobalPartyIdentifier">
                                    1.3.6.1.4.1.14100</PartyIdentifier>
75.                            <NameAddress>
76.                              <Name1>mySupplierName</Name1>
77.                            </NameAddress>
78.                        </LocationParty>
79.                      </DeliveryOrigin>
80.                    </DeliveryLeg>
81.                  </DeliveryMessageHeader>
82.                  <DeliveryMessageLineItem>
83.                    <DeliveryMessageLineItemNumber>
                                1</DeliveryMessageLineItemNumber>
84.                    <Product>
85.                      <ProductIdentifier Agency="Buyer" ProductIdentifierType="SKU">
                                1234567890</ProductIdentifier>
86.                    </Product>
87.                    <Quantity QuantityType="Count">
88.                      <Value UOM="Reel">5</Value>
89.                    </Quantity>
90.                  </DeliveryMessageLineItem>
91.                </DeliveryMessage>
92.            </BusinessDocument>
93.        </Payload>
94.    </papiNetEnvelope>
```

papiNetEnvelope Business Rules

Identifier	Business Rule
PE_001	DocumentType is mandatory, if DocumentType is supplied in the papiNet e-document being wrapped into the papiNetEnvelope.
PE_002	DocumentHistoryNumber is mandatory, if the document version is supplied in the document being wrapped into the papiNetEnvelope.
	The version of a papiNet e-document is supplied in TransactionHistoryNumber or TransactionHistoryConfirmationNumber. TransactionHistoryConfirmationNumber is used for the version, when the papiNet e-document is a confirmation document, e.g. OrderConfirmation, LoadTenderResponse, RFQResponse, CallOff of type CallOffConfirmation, LoadAvailable of type LoadAvailableConfirmation and

	ShippingInstructions of type ShippingInstructionsConfirmation.
PE_003	Time in DocumentDate is mandatory, if Time is supplied in the document issue date for the document being wrapped into the papiNetEnvelope. Time shall have the same format as in the document being wrapped into the papiNetEnvelope.
PE_004	OtherDocumentName is mandatory, if DocumentName has the value "Other".
PE_005	OtherDocumentType is mandatory, if other document type is supplied in the other XML document being wrapped into the papiNetEnvelope.
PE_006	Other XML documents than papiNet e-Documents can be wrapped into the papiNetEnvelope. Other XML document constructs might not contain other document type, document number, document date and document history number. These items can be added and communicated in the element Document of the papiNetEnvelope, when missing in other XML document constructs.

papiNet Envelope Root Element

papiNetEnvelope

The root element of the papiNet Envelope.

(sequence)

The sequence of items below is mandatory. A single instance is required.
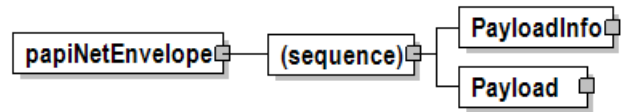
PayloadInfo

PayloadInfo is mandatory. A single instance is required.

A grouping element for items describing the e-business document and parameters related to its communication.

Payload

Payload is mandatory. A single instance is required.

A grouping element for payload information of the papiNet e-business document envelope.

Primary Elements

PayloadInfo

A grouping element for items describing the e-business document and parameters related to its communication.

TestFlag [attribute]

TestFlag is mandatory. A single instance is required.

If "true" or "1" then this is a test transmission. If "false" or "0" then this transmission is for production use.

(sequence)

The sequence of items below is mandatory. A single instance is required.

TransmissionInfo

TransmissionInfo is mandatory. One instance is required, multiple instances might exist.

Information about the transmission. Each participant in the transmission process appends a new TransmissionInfo element indicating that they are the TransmissionSender and to who, the TransmissionReceiver, the XML message is being transmitted to.

BusinessSender

BusinessSender is mandatory. A single instance is required.

The party who issued the document.

BusinessReceiver

BusinessReceiver is mandatory. A single instance is required.

The party for whom the business document is intended, the destination of the document.

- The party interested in the content. If the BusinessReceiver has outsourced the message service to a third party, then the BusinessReceiver is the intended party for the business document and not the party performing the receiving service of the electronic message.

Document

Document is mandatory. A single instance is required.

A group item containing information that describes the document contained in the envelope payload.

NumberOfAttachments

NumberOfAttachments is mandatory. A single instance is required.

The number of Attachment element instances in the payload.

Schema

Schema is mandatory. A single instance is required.

The name of the schema to use for validation. This can be a base URI or a
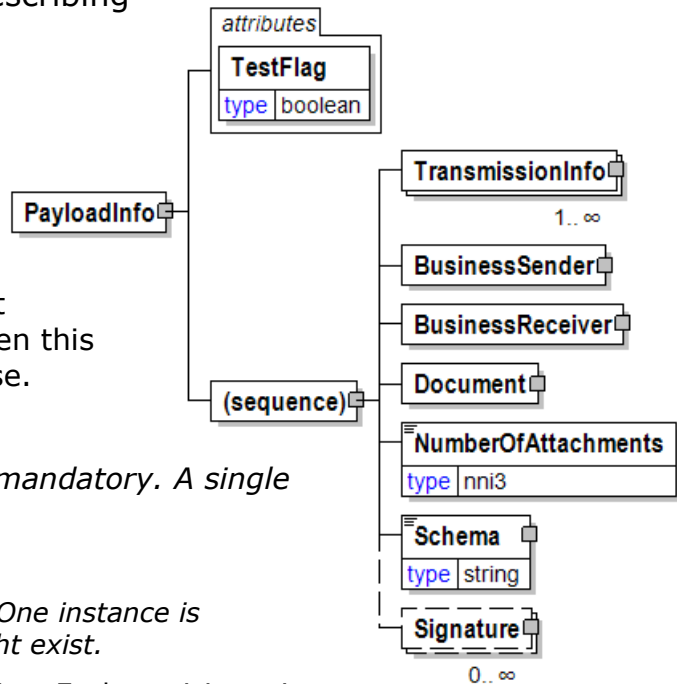
complete pointer to the schema to use.

Signature

Signature is optional. Multiple instances might exist.

A signature for the BusinessDocument or an Attachment included in the Payload that conforms to the W3C XML Digital Signature specification.

Payload

A grouping element for payload information of the business document envelope.

(sequence)

The sequence of items below is mandatory. A single instance is required.
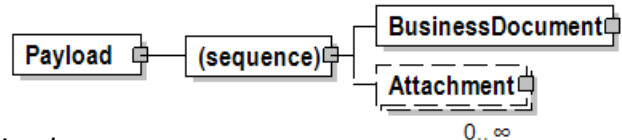
BusinessDocument

BusinessDocument is mandatory. A single instance is required.

This element contains the actual papiNet e-business document payload content.

Attachment

Attachment is optional. Multiple instances might exist.

An attachment to the e-business document in Base-64-encoded binary format.

Envelope Use Cases

XML Transmission Use Cases
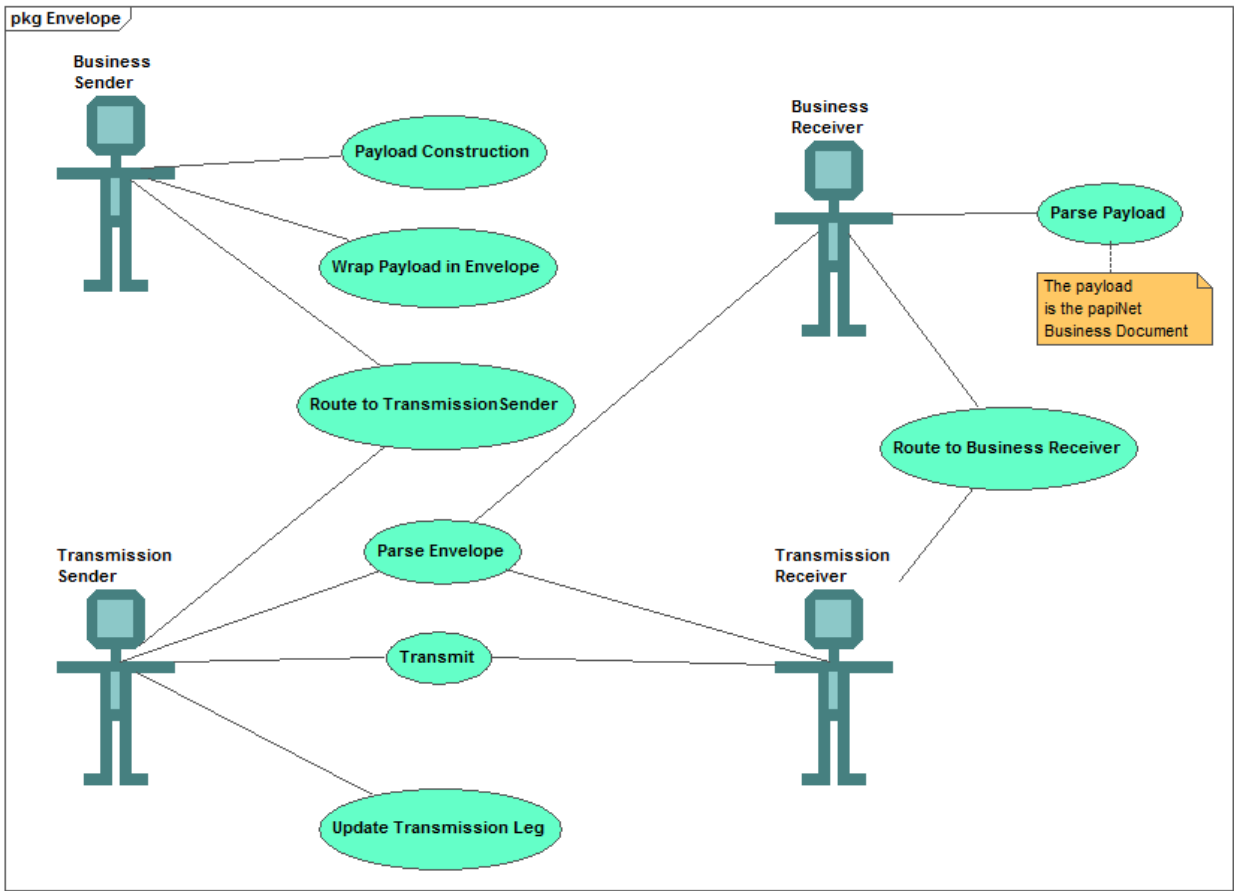
Goal	Receipt of papiNet payload by BusinessReceiver
Actors	BusinessSender, BusinessReceiver, TransmissionSender, TransmissionReceiver.
System	We are dealing with a message service and its associated components.
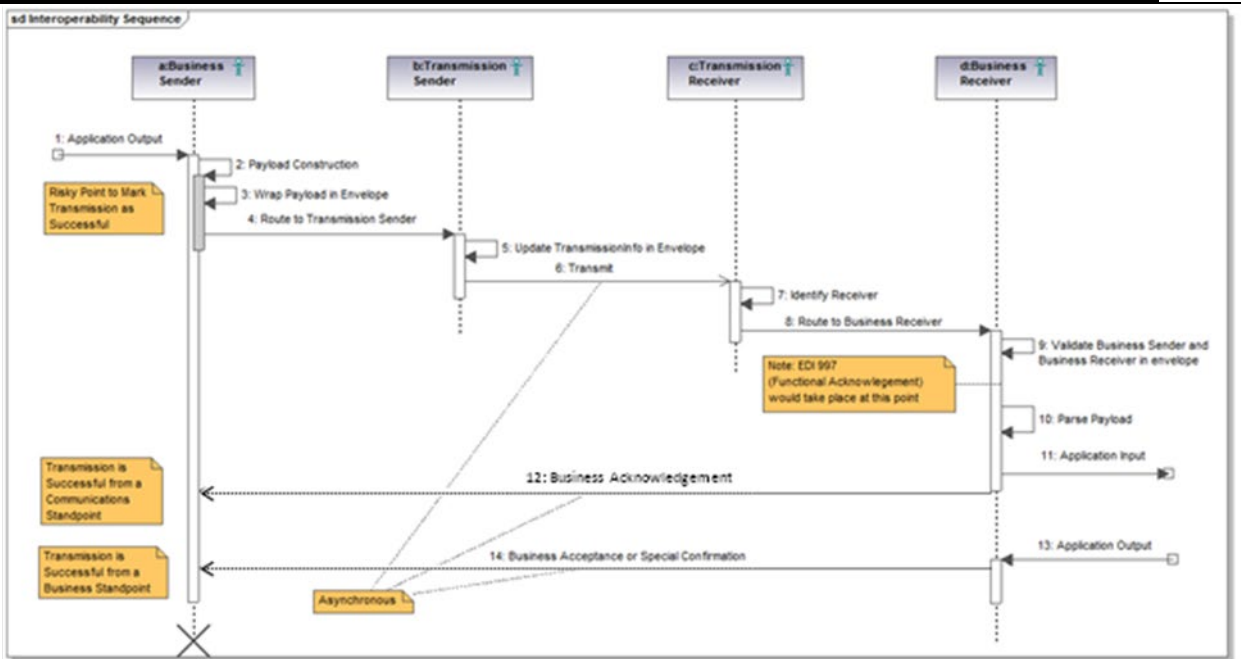
Discussion	The Business Sender is responsible for constructing the papiNet payload, wrapping it in the papiNet envelope, and routing the information to Transmission Sender.
	• The Business Sender and Transmission Sender can be the same entity.
	• The creation of the digital signature by the Business Sender and the insertion into the papiNet Envelope means that the Business Sender is responsible for the creation of the papiNet envelope.
	The Transmission Sender will parse the papiNet envelope to identify the Business Receiver and determine the appropriate transmission route, update the envelope with a new TransmissionInfo element instance, and then transmit.
	The Transmission Receiver will parse the papiNet envelope to identify the Business Receiver and either route directly to the Business Receiver or the Transmission Receiver will take the role of Transmission Sender if another intermediate transmission leg is required.
	The Business Receiver will parse the papiNet envelope to validate the Business Receiver and Business Sender identification, signatures, and schema information to use when parsing the payload and attachments.
	• In some environments it may be possible to

	separate the Business Document, Attachments, and Signatures from the papiNetEnvelope wrapper. However, it is expected that, in order to assure the validity of all information, in many environments the Business Receiver will process the XML information from within the papiNetEnvelope.

Envelope Parsing Usage Scenario
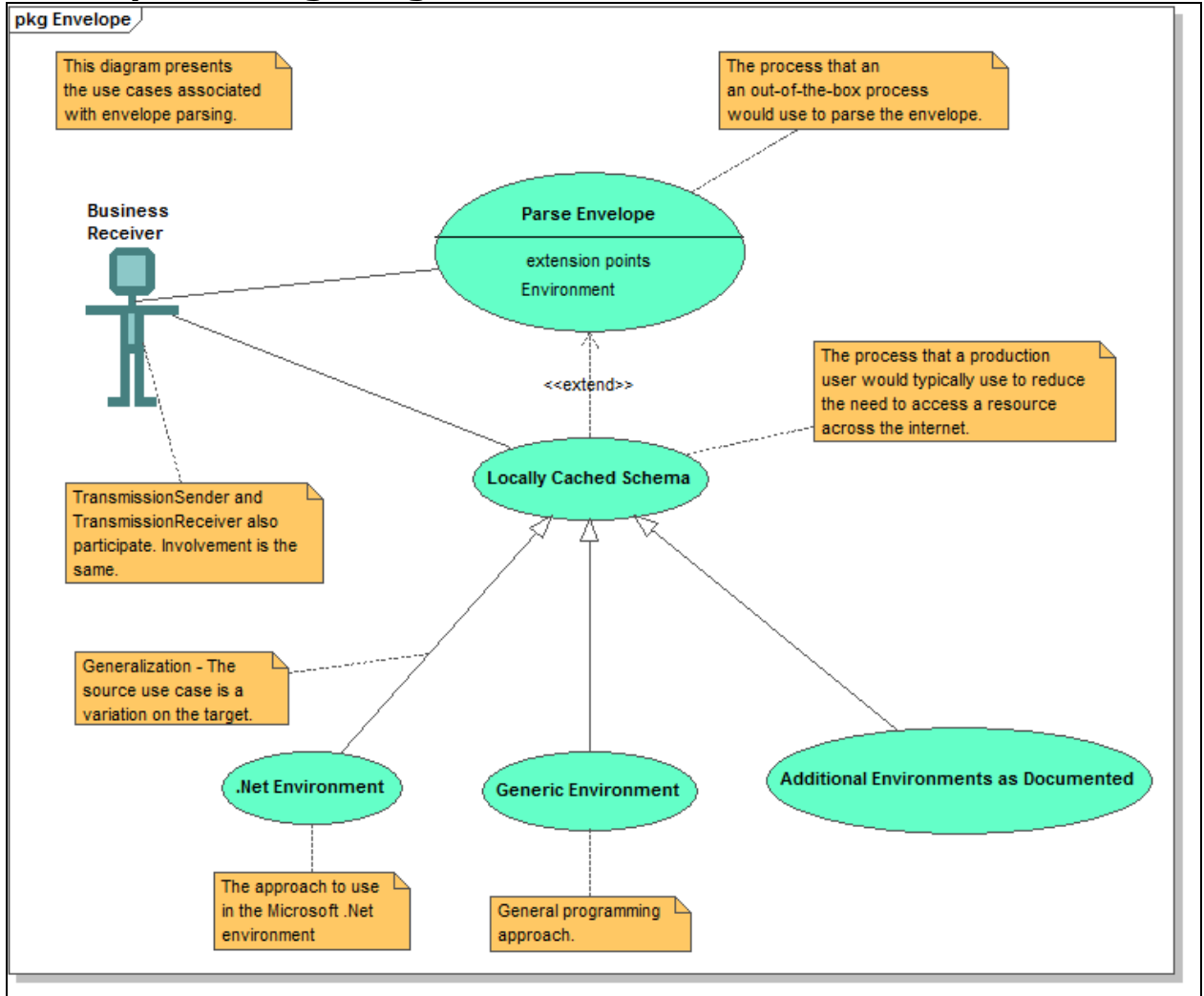
Parse Envelope

Goal	Read the papiNetEnvelope for information associated routing and payload processing
Actors	BusinessReceiver, TransmissionSender, TransmissionReceiver. • For clarity purposes only BusinessReceiver is shown.
System	In an environment where routing is managed outside of a formal message service (e-mail or

	sneaker-net) the system would typically be the XML parser that is within the Actors browser.
	Note: In environments where the routing process is automated the system events take place within the message service (MS) or a service that is tightly coupled with the MS.
Discussion	The parser will use the what it is defined to use to locate the schema for validation. This could be the xs:schemaLocation or hints provided by the namespace.

Locally Cached Schema

Goal	Permit the Actors to use schema that are locally stored instead of using schema that are indicated in the papiNet envelope. The schema indicated in the papiNet envelope would typically be stored at a location on the internet that would result in processing.
Actors	Refer to "Parse Envelope" use case.
System	In environments where the routing process is automated the system events take place within the message service (MS) or a service that is tightly coupled with the MS.
Discussion	papiNet examples indicate a schemaLocation. We do this to permit validation of the XML information in low-tech environments. You are not required to use schemaLocation information, even if it is included. There are several reasons why you would disregard the schemaLocation. The reason that we will be using for demonstrative purposes is the desire to use a locally stored schema, to improve the responsiveness of your production environment.
	Depending on your programming environment the technique for managing locally cached schema will be different. Refer to the specific use case for your environment for recommendations.

Locally Cached Schema in a .Net Environment

Goal	Refer to "Locally Cached Schema" use case.
Actors	Refer to "Parse Envelope" use case.
System	Refer to "Locally Cached Schema" use case.

Discussion	If you are using the .Net Framework version 1.0 then refer to System.Xml.XmlSchemaCollection for instructions.
	System.Xml.Schema.XmlSchemaSet is the approach recommended in .Net Framework version 2.0 as follows:
	• External namespaces or locations referenced in include, import, and redefine elements of a schema are resolved with respect to the base URI of the schema that includes or imports them. For example, if the base URI of the including or importing schema is empty or a null reference ("Nothing" in Visual Basic), the external locations are resolved with respect to the current directory. The XmlResolver class is used to resolve external schemas by default. To disable resolution of include, import, and redefine elements of a schema, set the XmlResolver property to a null reference ("Nothing" in Visual Basic).
	System.Xml.Schema.XmlSchemaSet is applied to a System.Xml.XmlReader using the XmlReaderSettings object:
	• The ProcessInlineSchema and ProcessSchemaLocation validation flags of an XmlReaderSettings object are not set by default. When these flags are set, the XmlResolver of the XmlReaderSettings object is used to resolve schema locations encountered in the instance document in the XmlReader. If the XmlResolver object is a null reference ("Nothing" in Visual Basic), schema locations are not resolved even if the ProcessInlineSchema and ProcessSchemaLocation validation flags are set.
References	XmlSchemaSet:
	• http://msdn2.microsoft.com/en-us/library/system.xml.schema.xmlschemaset.aspx
	XmlReader:
	• http://msdn2.microsoft.com/en-

	us/library/system.xml.xmlreader.aspx
	XmlReaderSettings:
	• http://msdn2.microsoft.com/en-us/library/system.xml.xmlreadersettings.aspx

Locally Cached Schema in a Generic Environment

Goal	Refer to "Locally Cached Schema" use case.
Actors	Refer to "Parse Envelope" use case.
System	Refer to "Locally Cached Schema" use case.
Discussion	Generally speaking when you want to use a local version of a schema instead of the schema referenced in the communicated XML information you will follow the follow steps:
	1. Determine if there is functionality within your environment to manage this particular scenario. Refer to the use case extensions for examples.
	2. Perform a non-validating read of the papiNet envelope to identify the /papiNetEnvelope/PayloadInfo/Schema element content along with its attributesUse the above information to populate the validating xml reader.

papiNetEnvelope Supporting Elements

Attachment

An attachment to the e-business document in Base-64-encoded binary format.

AttachmentIdentifier [attribute]

AttachmentIdentifier is optional. A single instance might exist.

The identifier for the attachment. Permits referencing the attachment from within the BusinessDocument payload or for signature purposes.
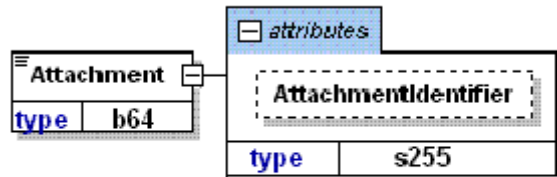
The AttachmentIdentifier links to any type of content for inclusion

AttachmentIdentifier [attribute]

The identifier for the attachment. Permits referencing the attachment from within the BusinessDocument payload or for signature purposes.
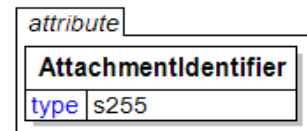
Build [attribute]

The build number of the schema. The build number of a papiNet schema is comprised of the version number associated with a date having the format vNrNN_yyyymmdd.
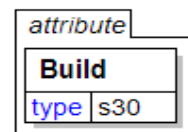
BusinessDocument

This element contains the actual business document payload content.
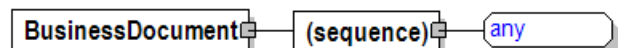
(sequence)

The sequence of items below is mandatory. A single instance is required.

[Any Type]

Any type of content is permitted at this point.

BusinessReceiver

The party for whom the business document is intended, the destination of the document.
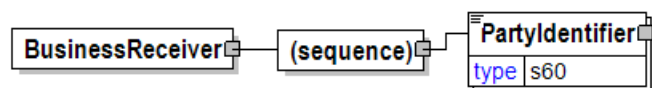
- The party interested in the content. If the BusinessReceiver has outsourced the message service to a third party, then the BusinessReceiver is the intended party for the business document and not the party performing the receiving service of the electronic message.

(sequence)

The sequence of items below is mandatory. A single instance is required.

PartyIdentifier

PartyIdentifier is mandatory. One instance is required, multiple instances might exist.

A unique identifier of a specific party. This element contains an attribute PartyIdentifierType that indicates the type of party.

BusinessSender

The party who issued the document.

(sequence)

The sequence of items below is mandatory. A single instance is required.
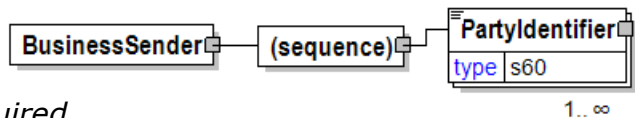
PartyIdentifier

PartyIdentifier is mandatory. One instance is required, multiple instances might exist.

A unique identifier of a specific party. This element contains an attribute PartyIdentifierType that indicates the type of party.

Date

A group element that contains the specification of Year, Month, and Day.

(sequence)

The sequence of items below is mandatory. A single instance is required.
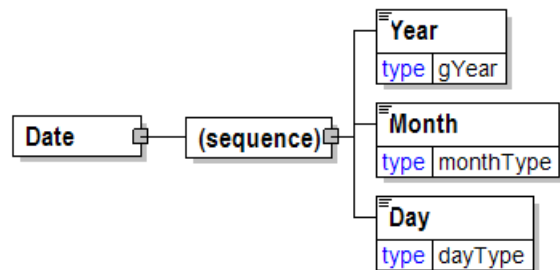
Year

Year is mandatory. A single instance is required.

Identifies the year number when communicating a calendar date.

Month

Month is mandatory. A single instance is required.

Identifies the month number when communicating a calendar date.

Day

Day is mandatory. A single instance is required.

Identifies the day of the month when communicating a calendar date. Day is an integer between 1 and 31.

Day

Identifies the day of the month when communicating a calendar date. Day is an integer between 1 and 31.

Document

A group item containing information that describes the document contained in the envelope payload.

DocumentName [attribute]

DocumentName is mandatory. A single instance is required.

Defines the name of e-Documents defined by papiNet.

Refer to DocumentName definition for any enumerations.

DocumentType [attribute]

DocumentType is optional. A single instance might exist.

Identifies the type of an e-Document defined by papiNet.

Refer to DocumentType definition for any enumerations.

OtherDocumentName [attribute]

OtherDocumentName is optional. A single instance might exist.

Defines the document name for documents that are not papiNet e-Documents. These documents are contained in the papiNetEnvelope, when attribute DocumentName has the value "Other".

OtherDocumentType [attribute]

OtherDocumentType is optional. A single instance might exist.

Defines the document type for a document that is not a papiNet e-Document.

(sequence)

The sequence of items below is mandatory. A single instance is required.

DocumentNumber

DocumentNumber is mandatory. A single instance is required.
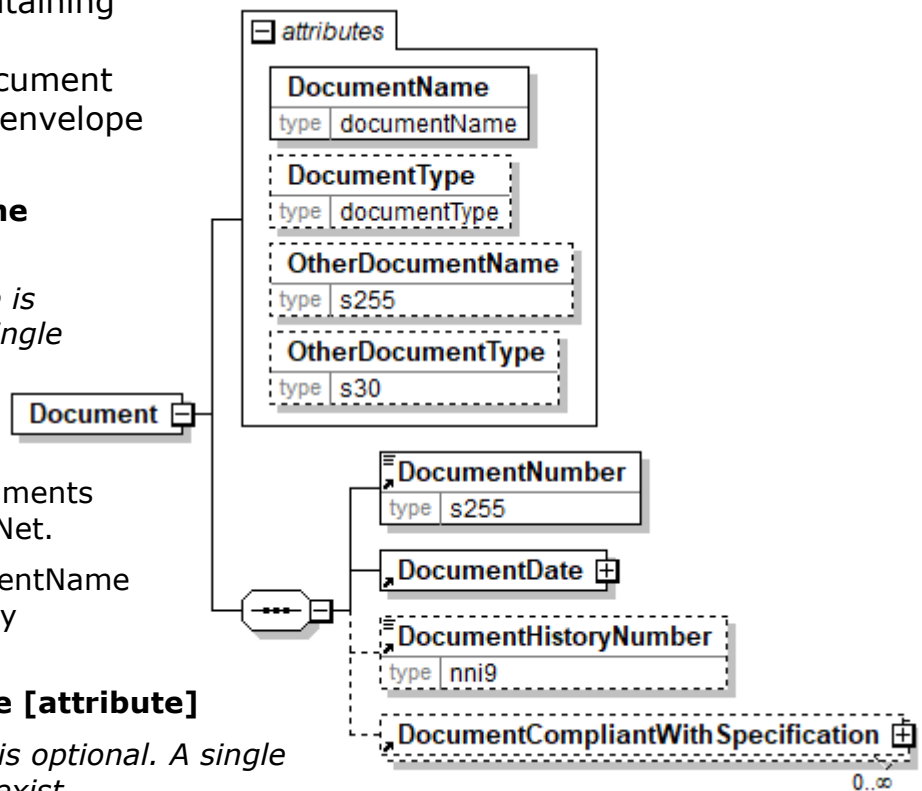
The unique identifier of the document included in the BusinessDocument element of the papiNetEnvelope Payload.

DocumentDate

DocumentDate is mandatory. A single instance is required.

The Date and optionally Time when the document that is referred to was issued.

DocumentHistoryNumber

DocumentHistoryNumber is optional. A single instance might exist.

A sequential number that keeps track of the version of a document.

DocumentCompliantWithSpecification

DocumentCompliantWithSpecification is optional. Multiple instances might exist.

A grouping element specifying the specification that the document is compliant with.

DocumentCompliantWithSpecification

A grouping element specifying the specification that the document is compliant with.
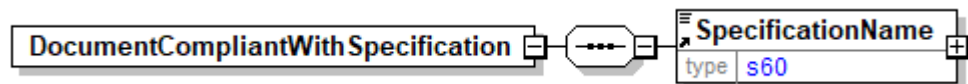
(sequence)

The sequence of items below is mandatory. A single instance is required.

SpecificationName

SpecificationName is mandatory. A single instance is required.

The name of a specification.

DocumentDate

The Date and optionally Time when the document that is referred to was issued.

(sequence)

The sequence of items below is mandatory. A single instance is required.
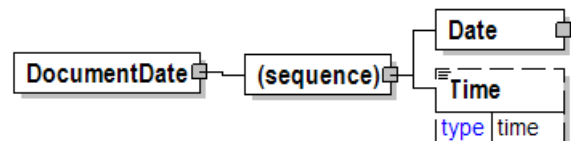
Date

Date is mandatory. A single instance is required.

A group element that contains the specification of Year, Month, and Day.

Time

Time is optional. A single instance might exist.

Time in papiNetEnvelope should have one of the following formats.

- hh:mm:ss±hh:mm is used to represent a time with a time zone. The time zone is communicated as the number of hours offset from the Universal Time Coordinate (UTC), a.k.a. Greenwich Mean Time.

- hh:mm:ssZ indicates the time at Zulu (another name for UTC).

DocumentHistoryNumber

A sequential number that keeps track of the version
of a document.

DocumentName [attribute]

Defines the name of e-Documents defined by papiNet.

This item is restricted to the following list.

Availability

The purpose of the Availability e-Document is to provide
a means to ask about the availability of the specified product. The amount of
the product immediately available (on-hand) is anticipated to be returned.
Optionally, the anticipated availability of the product at a point in future can
be communicated.

BookSpecification

The BookSpecification e-Document represents established product
specifications that can be referenced by multiple transactions in the
manufacturing life cycle of a product from RFQ through Invoice and
subsequent reprints and/or reorders. It captures unique book manufacturing
industry data elements as established by the buyer that are needed by the
supplier for manufacturing.

BusinessAcceptance

The receiver of a document uses the BusinessAcceptance to confirm to the
sender that the document is accepted or rejected. The BusinessAcceptance
can be used as a confirmation of acceptance when there is not a papiNet-
designed confirmation e-Document available. Although the
BusinessAcceptance is optional between two trading partners, its use is
strongly recommended when it is important to get a BusinessAcceptance.

BusinessAcknowledgement

An e-Document receiver uses the BusinessAcknowledgement to notify the
sender that a document has been successfully presented to the receiver's ERP
system. The BusinessAcknowledgement can be used to acknowledge any
papiNet e-Document. Although the BusinessAcknowledgement is optional
between two trading partners, its use is strongly recommended since it
provides positive verification of the beginning of the transaction by the
receiver.

Calendar

The Calendar e-Document is intended to communicate opening times or other
details for a location or locations

CallOff

A CallOff is a delivery schedule for product(s). Products to be delivered can be
specified by product specifications or by purchase orders. Any party as agreed
in a Trading Partner Agreement can send a CallOff. Each line item in a CallOff
refers either to a product included in a PurchaseOrder or to the product
specifications contained in the line item. The CallOff specifies delivery

schedule(s) and quantities for product(s) to be delivered. The schedule may define a specific date and/or time for delivery or include a time range. All products covered by a CallOff must be delivered to a single location.

CallOffWood

A CallOffWood is a business transaction instructing the consignor (normally the seller) to despatch goods belonging to one or several orders. A CallOffWood contains information about how the goods are to be loaded, quantities, marking instructions etc. It may also contain information about where borders are to be crossed and information concerning transport, such as name of ship and shipping agent. In cases where the CallOffWood is not used, delivery information is included in the order.

Complaint

Typically, a Complaint e-Document is sent from the customer or end user to the supplier to communicate information regarding products or services. A response from the supplier is desired and corrective actions, if required. This e-Document must specify the necessary details to enable the supplier to trigger an internal process to verify whether the complaint reason corresponds to the supplier-assessed reason.

ComplaintResponse

Typically, a ComplaintResponse e-Document is sent from the supplier or sender parties to the party who has originated the Complaint, or possibly to the RespondToParty. The e-Document is sent to communicate the acceptance, partial acceptance, or rejection, of the preceding complaint(s) with supporting information. Whatever the decision, this e-Document must specify how the complaint will be processed.

ContentOrderOfMatter

The ContentOrderOfMatter e-Document accompanies the prep content files for the sole purpose of specifying the page sequence in the book and the associated folio information.

Contract

The Contract e-Document can be used by business partners to communicate business agreements. Contracts are managed by a ContractParty that normally is the seller or the buyer. The Contract e-Document can also be sent to service providers that need the contract information for carrying out their services.

CreditDebitNote

The CreditDebitNote e-Document is generally used by the SupplierParty to compensate or charge the trading parties (ShipToParty, BuyerParty, OtherParty, etc.) for matters outside the scope of the Invoice.

DeliveryInstruction

A DeliveryInstruction can be used to instruct movement of goods to warehouses and movement of goods to virtual locations within warehouses as well as deliveries to customers. The DeliveryInstruction e-Document is designed to fulfil supply chain requirements regarding instruction for goods deliveries to Mills, Suppliers, Forwarders, Warehouse Operators, Customers, and End-Users. The DeliveryInstruction is load oriented which is very efficient

when mills and suppliers move goods in large quantities between warehouses.

DeliveryMessage

The DeliveryMessage e-Document enables the sender to describe the contents and configuration of a shipment at various levels of detail.

DeliveryMessageBook

The DeliveryMessageBook e-Document enables the sender to describe the contents and configuration of a shipment at various levels of detail.

DeliveryMessageWood

The DeliveryMessageWood e-Document enables the sender to describe the contents and configuration of a shipment at various levels of detail.

DeliveryPlanning

The DeliveryPlanning e-Document provides a tool for trading partners to exchange information about logistics planning for deliveries, transports and resources. Information can be specified for various levels such as a Budget, a Forecast, a Demand or a detail Plan for a certain period. Actual outcome to date related to a plan can also be reported.

Reason for deviation between a plan and the actual outcome can be reported. Opening times and/or contingencies can be specified for locations for a given day or period.

The DeliveryPlanning e-Document can supply a complete sourcing plan for a certain planning region containing for example many mills. Origin and destination for products can be specified as well as various transport modes and other transport details.

GoodsReceipt

The ShipTo party, or authorised agent, sends a GoodsReceipt e-Document to the Supplier and/or to the Buyer acknowledging that a specific delivery or a number of deliveries in a given time period have been received and their status.

InfoRequest

The purpose of InfoRequest e-Document is to allow the requesting party to request from the receiver party an update. The e-Documents that may be returned in response to an InfoRequest are the Availability, Calendar, InventoryStatus , OrderStatus, Planning, ProductQuality, ShipmenStatus, ShippingInstructions or Statement.

InventoryChange

The purpose of the InventoryChange e-Document is to inform involved parties about changes in the inventory at a specific location. The e-Document provides information allowing the receiving party to update their systems for cost tracking, performance, and financial reporting.

InventoryDispositionInstructions

The InventoryDispositionInstructions e-Document permits the owner of inventory stored at a third party location to request the inventory be destroyed, shipped to another location, held in inventory, or physically changed. The receiving party makes the requested changes to the inventory and sends an InventoryChange and ShippingInstructions, if required, to the

requestor so their systems can be updated.

InventoryStatus

The InventoryStatus e-Document informs involved parties about physical inventory levels at specific stock locations (warehouse, terminal, printer etc.) at a certain time (snapshot).

Invoice

An Invoice e-Document can handle both debits and credits. Typically a seller sends an Invoice to a buyer after delivering the products or services specified in a PurchaseOrder or as part of an automatic replenishment agreement. Alternatively, an Invoice can be prepared by the buyer as part of a self-billing process. The Invoice is a list of the goods shipped and their quantities, or services rendered, indicating the price, terms of sale, supplemental charges, allowances, and communicates the payment required for the indicated items.

InvoiceWood

An InvoiceWood e-Document can handle both debits and credits. Typically a seller sends an InvoiceWood to a buyer after delivering the products or services specified in a PurchaseOrder or as part of an automatic replenishment agreement. Alternatively, an InvoiceWood can be prepared by the buyer as part of a self-billing process. The InvoiceWood is a list of the goods shipped and their quantities, or services rendered, indicating the price, terms of sale, supplemental charges, allowances, and communicates the payment required for the indicated items.

LoadAvailable

The Supplier party or authorized agent sends a LoadAvailable e-Document to the BuyerParty (consuming mill) indicating that load(s) for specific product is (are) ready on a specific date for acceptance and pickup. The LoadAvailable e-Document from the supplier may include a Shipper Load Number. This number may be used as the consuming mill's release number The Shipper Load Number is used for authorization for pick-up of load at supplier point.

LoadTender

The LoadTender e-Document supports the transport booking process. Transport booking includes the following steps:

- LoadTender – more than one carrier has been informed about the upcoming transport.
- Booking – identifies a transport booking that is part of a detail transport plan, the load has been booked with a single carrier.

LoadTenderResponse

The LoadTenderResponse e-Document supports the transport booking process and is used as a response e-Document to LoadTender e-Document. Transport booking includes the following steps:

- LoadTenderResponse – more than one carrier has been informed about the upcoming transport.
- BookingConfirmation – identifies a transport booking that is part of a detail transport plan, the load has been booked with a single carrier.

MeasuringInstruction

The MeasuringInstruction e-Document can be used to instruct a measuring party what to measure and how to measure it. Packages and loads as well as individual items can be measured.

MeasuringTicket

The MeasuringTicket e-Document specifies the details from measuring of items. Packages and loads can be measured as well as individual items in packages and loads. Products, Quantities and various measured properties can be reported. These measurements can be used as a base for calculation of billable products.

OrderConfirmation

A seller sends an OrderConfirmation e-Document to a buyer after receiving a PurchaseOrder from that buyer. The e-Document contains a response to the conditions specified in the PurchaseOrder. A supplier may also send an OrderConfirmation e-Document to convey changes that the supplier has made in the order or to convey new information such as a Supplier Reference Number or Job Number.

OrderConfirmationWood

A seller sends an OrderConfirmationWood e-Document to a buyer after receiving a PurchaseOrder from that buyer. The e-Document contains a response to the conditions specified in the PurchaseOrder. A supplier may also send an OrderConfirmationWood e-Document to convey changes that the supplier has made in the order or to convey new information such as a Supplier Reference Number or Job Number.

OrderStatus

The OrderStatus e-Document permits the sender to report the current status of an order, specific order line items, or to report status of multiple orders based upon some specified criteria. The e-Document enables the sender to indicate a primary status as well as an additional secondary status at the order level as well as for each line and component.

PackingList

The PackingList e-Document specifies the details of a shipment that is being despatched. The seller should send the PackingList e-Document in sufficient time so that the recipient can process the information before the goods arrive. The recipient can then prepare efficiently for the receipt of the goods.

Planning

The Planning e-Document provides a tool for trading partners to exchange forecasted or planned information for a specific product or event within a specified timeframe. The e-Document is designed to support a variety of business processes, which may include securing needed supplies or simply the exchange of information.

Preflight

The Preflight e-Document reports the status of prep content files separately, by product or by Purchase Order or to report status of multiple files based upon some specified criteria. The e-Document enables the sender to indicate a primary status as well as an additional secondary status as needed.

ProductAttributes

The ProductAttributes e-Document provides the means to communicate information about products between business partners.

ProductPerformance

The ProductPerformance e-Document is created by the product consumer in order to communicate back to the manufacturer the performance of the product. This e-Document will enable the manufacturer to focus on improvements related to product defects that create inefficiency during performance. The aggregation of performance factors by product will provide the mechanism for achieving the value aspect of the e-Document. The goal is to keep the products of the Pulp & Paper Industry attractive versus competing alternatives.

ProductQuality

The ProductQuality e-Document supports the exchange of quality data for individual items. The agreed properties of the product that are exchanged can include statistical values such as minimum and maximum, standard deviation, sample size, two sigma (lower-limit, upper-limit).

PurchaseOrder

A buyer sends a PurchaseOrder e-Document to a supplier to initiate a trade transaction. This e-Document, which is a request for product, usually represents a firm commitment to buy. (For one type of PurchaseOrder, called a reservation order, the PurchaseOrder is not a firm commitment to buy).

PurchaseOrderWood

A PurchaseOrderWood e-Document is set up between a buyer and a seller. In some cases an agent acts on behalf of the seller or the buyer when setting up the contract. However, the contract is not valid until signed by the buyer and the seller. A PurchaseOrderWood may cover one delivery of merchandise on one occasion or cover a time period with several deliveries. This PurchaseOrderWood refers to a standardised contract form containing all legal details.

QR

QR (Quick Response) is a light weight papiNet e-Document that is designed to be carried by Quick Response Codes. Multiple document types can be defined in the QR e-Document supporting different contents of QR Codes.

RFQ

A buyer sends an RFQ e-Document to a supplier to initiate a request for quotation. This e-Document, which is a request for product information, represents a request for the supplier to provide a quotation for product availability, shipping, and price.

RFQResponse

A supplier sends an RFQResponse e-Document to a buyer as a response to an RFQ e-Document from the buyer. The e-Document specifies a quotation for product availability, shipping, and price.

ScaleTicket

The ScaleTicket e-Document provides wood or fibre suppliers with a means to electronically incorporate scale system receiving data into their accounting systems from buying entities' back office systems.

ServiceInstruction

The ServiceInstruction e-Document can be used to instruct a party to carry out a service. Characteristics for the service can be specified.

Instructions for deliveries and measuring of products have dedicated e-Documents DeliveryInstruction and MeasuringInstruction.

ShipmentStatus

The ShipmentStatus e-Document is sent to communicate the status of a shipment or consignment with references to other documents. Typically, a ShipmentStatus e-Document is sent from the forwarder or carrier to the consignor / forwarder.

ShippingInstructions

The ShippingInstructions e-Document communicates delivery information for product(s) supported by a PurchaseOrder.

Statement

The Statement e-Document permits the manufacturer or supplier to report the current status of an invoice, or a list of invoices based upon specified criteria. The e-Document enables the sender to indicate payment status for the invoice.

Usage

The Usage e-Document is used to notify a supplier or buyer that material has been consumed within the end user's manufacturing process.

Other

Other e-document not specified by papiNet. The name of such e-document is specified by the attribute OtherDocumentName.

DocumentNumber

The unique identifier of the document included in the BusinessDocument element of the papiNetEnvelope Payload.

DocumentType [attribute]

Identifies the type of an e-Document defined by papiNet.

This item is restricted to the following list.
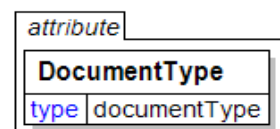
Agreement

A legally binding exchange of promises between parties that the law will enforce.

Approximate

An Invoice that is created to record ownership transfer without the material physically being moved. Typically what occurs is that the buyer has agreed to take ownership of the item at a certain point in time but has not arranged for

transportation. Approximate invoices are invoices that are claiming payment.

ArrivalTicket

A MeasuringTicketType that contains information about rough measurements done upon arrival of a transport vehicle to a measuring location. For example used for updating physical location of the load and calculating compensation to the carrier.

AvailabilityInstruction

An AvailabilityInstruction can specify many delivery events. Each event can contain quantity for one or many loads, but does not specify the load. A DeliveryInstruction type DeliveryInstruction specifies more details for the events in an AvailabilityInstruction. AvailabilityInstruction can also be handled by the company responsible for the delivery independently if so agreed.

BlanketOrder

An order that communicates the same information as a StandardOrder but also indicates that the order may be completed over a period of time or, until a certain volume is achieve or, until a certain currency amount is spent.

Booking

An indication that time for a service is required. For example a booking that is part of a detail transport plan.

BookingConfirmation

A communication affirming the placement of the booking with a particular party.

CalibrationCheckLog

A MeasuringTicketType that contains a check log with information about calibration of measuring equipment.

CallOff

Defines a CallOff sent by the buyer to the seller.

CallOffConfirmation

Defines a CallOff confirmation sent in response to a CallOff.

Claim

A "Claim" type is used when there is a customer reaction that includes a financial compensation.

ConfirmingOrder

A confirming order is used to electronically confirm an order that has not been placed electronically by the customer that is, it was placed using another mean such as fax, phone or email.

ConsumptionOrder

A PurchaseOrder that is based upon consumption for a particular period of time or instance.

CreditNote

Credits that are provided for amount reductions and complaints. A CreditNote will normally have a reference to an earlier issued Invoice.

DebitNote

A DebitNote claims payment for additional charges. A DebitNote normally has a reference to an earlier issued Invoice.

DeliveryInstruction

A DeliveryInstruction can specify many delivery events. Each event can contain quantity for one or many loads. A sequence in a DeliveryInstruction specifies all details for one event. The receiver of a DeliveryInstruction can generate many Loading Instructions from one DeliveryInstruction.

DeliveryMessage

A DeliveryMessage type that contains optional routing information, quantities at the DeliveryMessageLineItem level, and details at the DeliveryMessageLineItemDetail level. The seller uses a DeliveryMessage to provide delivery details to the ship-to party and tracking information.

DeliveryPlan

A DeliveryPlanningType used to inform about quantities and times for the planned deliveries to the delivery destinations.

Duplicate

To be removed in a future version. When an Invoice is reissued as a duplicate the Invoice type should be the same as on the original Invoice. Use attribute Reissued = Yes to indicate a duplicate.

Feedback

A "Feedback" type is used when there is a customer reaction that doesn't include any financial compensation.

ForestLoggingInstruction

An instruction specifying what products to produce in a forest logging and forwarding operation.

InitialShipmentAdvice

A DeliveryMessage type that contains detailed routing information, quantities at the DeliveryMessageLineItem level and optionally details at the DeliveryMessageLineItemDetail level. The seller uses the InitialShipmentAdvice to provide preliminary notification of shipment routing and quantities (can be used as an advanced notice of delivery). The quantities indicated may not necessarily be delivered—for example, if there is damage in transit or the delivery is rerouted to another destination.

Invoice

A regular Invoice (referred to as an Invoice) is claims payment for products, services, and charges supplied under conditions agreed to between seller and buyer. The Invoice communicates, among other things, payment terms, payment method, and the payment amount required for one or more deliveries.

InvoiceSpecification

A MeasuringTicketType that contains information about measured products including prices and amounts. This MeasuringTicketType is normally used as a detailed specification of billable or invoiced products.

LoadAvailable

LoadAvailable indicates the e-Document is from the company with the load.

LoadAvailableConfirmation

LoadAvailableConfirmation indicates the e-Document is from the company to whom the load was offered.

LoadedSpecification

A DeliveryMessage type that contains a specification of loaded goods on a transport unit (e.g. container, rail wagon). A loading specification (LoadedSpecification) can contain goods belonging to many suppliers and buyers and is normally referring to a Loading Instruction.

LoadingInstruction

A Loading Instruction specifies loading of transport units. A Forwarder receiving a DeliveryInstruction from a supplier can convert it into many Loading Instructions, which are sent to a Warehouse Operator. A sequence in a Loading Instruction specifies all details how to load one transport unit. A Loading Instruction can include goods from many delivery instructions and also goods belonging to many suppliers.

LoadingOrder

Specifies delivery schedule, the transport booking requirements and shipping instructions, as well as the internal work order for the shipment

LoadingSchedule

The schedule for transport vehicle loading.

LoadTender

More than one carrier has been informed about the upcoming transport requirement (the load).

LoadTenderResponse

Indicates the ability of the respondent to fulfill the load tender request.

MeasuringInstruction

An instruction to measure products. Normally a measurement includes both quantity and quality.

MeasuringTicket

A MeasuringTicketType that contains detailed information about measured products and items. This information can be used as a base for calculation of billable products.

OfficeSchedule

The schedule for office personnel.

OriginalContract

A contract between the first seller and the first buyer in a supply chain. For example a contract when a forest owner sells roundwood to a forest company.

PackingSpecification

A Packing Specification is a business transaction specifying the complete consignment being shipped from a consignor to a consignee. The specification

describes in detail what is being shipped and how it is packed and marked.

PreBooking

A requirement for a transport vehicle or unit reservation that has risen from a rough transport plan.

PreBookingConfirmation

A communication of the requirement for a transport vehicle or unit reservation that has risen from a rough transport plan.

PrePayment

A prepayment Invoice is used as a notification of amounts to be paid in advance. It is not a legal Invoice claiming payment for provided products or services.

PriceList

Used when sending a pricelist

ProductCrossReference

Used in the exchange of ProductIdentifier cross-references for the product codes used by two trading partners.

ProductDestiningInstruction

An instruction requesting the receiver to destine product(s) to end users.

ProductionTicket

A MeasuringTicketType that contains information about produced products and items. A ProductionTicket can also contain measuring information for produced items.

ProductProperties

Used when sending a list of ProductAttributes

ProForma

A proforma debit note.

A proforma debit note is not a legal invoice claiming payment. A proforma debit note is an e-Document serving as a preliminary invoice, containing on the whole the same information as the final invoice, but not actually claiming payment. Proforma debit notes are typically used in a cross-border shipment for customs purposes. Can travel with the product or be sent to a broker.

ProFormaCreditNote

A proforma credit note.

A proforma credit note is not a legal invoice for credits. A proforma credit note is an e-Document serving as a preliminary credit note, containing on the whole the same information as a final credit note. A proforma credit note will normally have a reference to an earlier issued proforma debit note.

PropertyTicket

A MeasuringTicketType that contains detailed information about calculated or measured properties of a SourceProduct not related to a specific delivery.

It typically consolidates property information over a time period, measuring location and other attributes defined in an InfoRequest or otherwise agreed

between partners.

QR_DMM

Contains information needed by a measuring party to be able to start measurement of products for a delivery. It is condensed information from information normally found in a papiNet DeliveryMessage.

ReceptionTicket

A MeasuringTicketType that contains information about reception verification done upon arrival of a transport. For example, the load can be verified that it only contains proper products and that it doesn't contain any forbidden foreign objects. Based on the verification the load can be accepted or rejected.

ReleaseOrder

A release order is used to release a product to be made. This type of order refers to a previous order or agreement, such as a reservation order, a contract, or a blanket order. A release number version which is an incremented number, is used in this type.

ReservationOrder

A reservation order is used to book a paper supplier's capacity for specific quantities of specific products, but it is not yet a firm commitment to buy. Consequently, all line items of a reservation order have a ProductionStatusType of NotFree. To release one or more PurchaseOrder line items of a reservation order, a buyer can use a standard order or a release order.

ResourcePlan

A DeliveryPlanning type that contains information about all the planned resources available for a certain period. The resources can be for example vehicles or personnel.

SalesCatalogue

A MeasuringTicketType that contains information about measurements of products for sale. For example used for sending information about logs at roadside or standing trees for sale.

SampleMeasuringInstruction

An instruction to measure samples to check the original measurements or to measure specific properties in for example a laboratory.

SampleMeasuringTicket

A MeasuringTicketType that contains detailed information about measured samples taken from e.g. a delivery.

SelfBillingStatement

A SelfBillingStatement is an Invoice that is prepared by the buyer of the product (or the consumer of the service) for the provider of the product or service. The preparer will pay the Invoice.

Typically, logistics cost-charges are the services that are communicated. They are incurred during a certain period of time between the party who provides the logistics services (typically the party with a LogisticsRole of "LogisticsProvider") and the requestor of such services (typically the party with

a LogisticsRole of "Consignor").

Raw materials, maintenance, repair, and operating supplies are examples of products that can be entered on a self billing statement for products. This type of Invoice is also referred to as an invoice for "evaluated receipts" because it developed from the receiving department's evaluation of their receipts and from that creating the Invoice.

The SelfBillingStatement process exists when there is a great deal of trust between the trading partners that permits this cost savings business process.

ShipmentAdvice

A DeliveryMessage type that contains a specification of goods, that are dispatched and will be delivered to a warehouse. A ShipmentAdvice can refer to a DeliveryInstruction Sequence or a CallOff, but is normally also used for notifying a receiving warehouse operator of shipments to the warehouse.

ShippingInstructionsConfirmation

Confirmation of the Shipping Instruction.

ShippingInstructionsDistribution

Shipping Instruction serves as a billable order for shipping product that was produced under a previous manufacturing order.

ShippingInstructionsPackaging

To be deprecated in a future version. Guidance will be given to trading partners not to use this enumeration.

ShippingInstructionsRouting

Shipping instructions issued in conjunction with a PurchaseOrder for shipping the product.

SpecContent

Indicates that BookSpecification should only be used in the content file verification process.

SpecOrder

Used when the BookSpecification e-Document is intended for use with the PurchaseOrder transaction.

SpecRFQ

Used when the BookSpecification e-Document is intended for use with the Request for Quote (Estimate) transaction.

StandardOrder

A standard order is a regular one-time order. It defines quantities for one or more products to be purchased and may also define a delivery location and date. A standard order may reference a previous agreement (for example, a quotation, a contract, or a reservation order) for information.

StandardRFQ

SupplierSpec

Will be removed in a future version. Recommended not to be used.
(Old definition: Used when the BookSpecification e-Document is intended for

use by the Supplier only and is not generated by, or transmitted to the Buyer).

SupportSchedule

The support schedule for transport operations.

ThirdPartyShipmentAdvice

Notification of a shipment from a warehouse to a party other than the party that ordered the product from the supplier.

TradingContract

A contract between a seller and a buyer, when products (or services specified as products) bought by the seller are resold to a buyer in a supply chain. For example a contract when a forest company sells roundwood bought from a forest owner or another forest company to a buyer.

TransportPlan

A DeliveryPlanningType used to inform about quantities and times for the planned transports to the delivery destinations.

TrialOrder

A trial order is used whenever a seller has agreed to have a buyer sample a product. The seller needs to process this order differently from other orders, because a trial order may include a product sold at a discounted rate or even provided for free. A trial order typically is for small quantities.

UniqueProductIdentifier

The information contains unique product identifiers.

UnloadingSchedule

The schedule for transport vehicle unloading.

Waybill

The forwarding agreement or carrying agreement that is used as a receipt for cargo and as a contract of carriage.

ID

The unique identifier for the transmission. You can develop this identifier independently from other systems or you can use a similar identifier to one that you are currently using. For example, you could use something similar to the ISA control number in X12.

ID	
type	string

Month

Identifies the month number when communicating a calendar date.

Month	
type	monthType

NumberOfAttachments

The number of Attachment element instances in the payload.
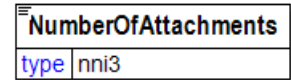
| NumberOfAttachments	
type	nni3

OtherDocumentName [attribute]

Defines the document name for documents that are not papiNet e-Documents. These documents are contained in the papiNetEnvelope, when attribute DocumentName has the value "Other".
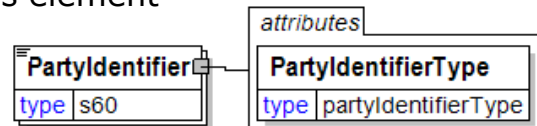
attributes

OtherDocumentName	
type	s255

OtherDocumentType [attribute]

Defines the document type for a document that is not a papiNet e-Document.

attributes

OtherDocumentType	
type	s30
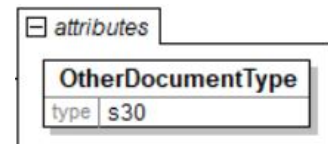
PartyIdentifier

A unique identifier of a specific party. This element contains an attribute PartyIdentifierType that indicates the type of party.

PartyIdentifier		attributes	
type	s60	PartyIdentifierType	
		type	partyIdentifierType

PartyIdentifierType [attribute]

PartyIdentifierType is mandatory. A single instance is required.

Provides a contextual definition for the party identifier value. This party identifier enables the trading partners to use ID codes for the different organisation versus business entities involved in the transaction.

Refer to PartyIdentifierType definition for any enumerations.

PartyIdentifierType [attribute]

Provides a contextual definition for the party identifier value. This party identifier enables the trading partners to use ID codes for the different organisation versus business entities involved in the transaction.

attribute

PartyIdentifierType	
type	partyIdentifierType

This item is restricted to the following list.

DunsNumber

A 9-digit identifier maintained by Dun & Bradstreet to uniquely identify a commercial enterprise.

Duns4Number

Similar to the DunsNumber that defines a parent company/organization. The additional 4 digits enable the definition/identification of a sub-entity, such as a mill/plant of this parent company/organisation.

GlobalLocationNumber

The globally unique EAN.UCC System identification number for legal entities, functional entities and physical locations. The Global Location Number uses the EAN/UCC-13 Data Structure. Details about the structure and usage are available at the http://www.gs1.org website.

ISO6523Number

This partyidentifier type is defined by ISO 6523, Structure for the Identification of Organizations, which defines the standard for a code to be used for party identification in electronic data interchange. The code is globally unique, because of the used structure. The structure of the identifier is, using xxxx99999999(NNNNN) as the example:

- xxxx The International Code Designator (ICD-code) is a fixed-length code of four digits that identifies the authority issuing the ISO 6523 organization code; e.g. 0037 is the ICD-code (International Code Designator) for National Board of Taxes in Finland.

- 99999999 The organization code consists of up to 14 characters. The Code Designator (defined by ICD-code) defines the use of the organization code. The used code can be an existing code or, the code designator assigns the code to companies based on request. The Code Designator makes sure that the codes in their list are unique.

(NNNNN) Optional variable length information, to further identify the organization. The use of this is part defined by the code designator.

papiNetGlobalPartyIdentifier

A readily available and free identifier supported by IANA (the Internet Assigned Numbers Authority). Private Enterprise Numbers that conforms to proper URI naming conventions are available, free-of-charge from the Internet Assigned Numbers Authority (IANA). The application form is available at the http://www.iana.org/cgi-bin/enterprise.pl website. Obtaining an IANA Private Enterprise Number (PEN) will permit globally unique trading partner identification.

The format of papiNetGlobalPartyIdentifier is

1.3.6.1.4.1.PrivateEnterpriseNumber[.EnterpriseLocationNumber]

Only characters 0-9 and "." are allowed in the identifier. The PrivateEnterpriseNumber is a positive non-zero integer.

The EnterpriseLocationNumber is optional with values managed by the organisation identified by the Private Enterprise Number. It is a positive non-zero integer, without leading zero(s).

The EnterpriseLocationNumber may be an enumerated list of integers separated by the full-stop character ".". It depicts an organisational sub-tree of integers, where the levels are separated by the full-stop character (.) as a separator.

For example identifier value 1.3.6.1.4.1.14302.10.5 is valid but identifier

values 1.3.6.1.4.1.14302.0.5, 1.3.6.1.4.1.14302.ABC, 1.3.6.1.4.1.14302.15-20 and 1.3.6.1.4.1.14302.03 are NOT valid.

The EnterpriseLocationNumber is an optional unique location number within the Enterprise assigned by the Enterprise itself, for example

1.3.6.1.4.1.14302   The Enterprise

1.3.6.1.4.1.14302.4   Location number 4 of the Enterprise, e.g. a paper mill.

1.3.6.1.4.1.14302.12   Location number 12 of the Enterprise, e.g. a pulp mill.

Please refer to sections 3.1.4 and 3.2 in Internet Engineering Task Force RFC 1155 "Structure and Identification of Management Information for TCP/IP based Internets" for further details at https://tools.ietf.org/html/rfc1155.

StandardAddressNumber

A 7-digit code to uniquely identify an organisation and its location. The number consists of 6 digits with an 11-modulus check digit as the seventh digit. ISAN is the same with the ISO Country code as a prefix. This identifier is solely used by the book industry.

Schema

The name of the schema to use for validation. This can be a base URI or a complete pointer to the schema to use.

Version [attribute]

Version is mandatory. A single instance is required.

The version identifier for the schema. For papiNet schema the version is at the end of the schema file name and follows the format of VnRnn. The version can also be found in the version attribute of the root element as the beginning of the build number.
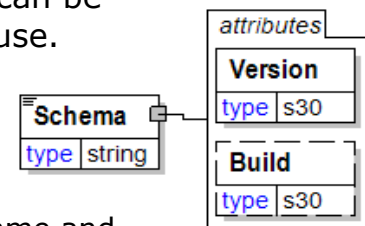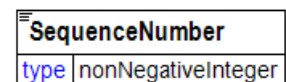
Build [attribute]

Build is optional. A single instance might exist.

The build number of the schema. The build number of a papiNet schema is comprised of the version number associated with a date having the format vNrNN_yyyymmdd.
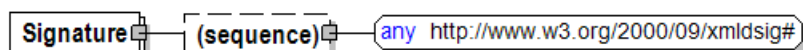
SequenceNumber

The sequence of the item. Provides a mechanism for sorting.

Signature

A signature for the BusinessDocument or an Attachment included in the Payload that

conforms to the W3C XML Digital Signature specification.

(sequence)

The sequence of items below is optional. A single instance might exist.

[Any Type]

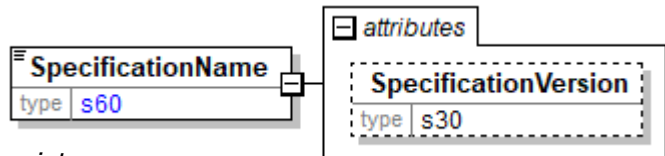Any type of content is permitted at this point.

SpecificationName

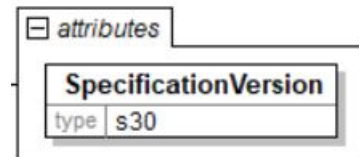The name of a specification.

SpecificationVersion [attribute]

SpecificationVersion is optional. A single instance might exist.
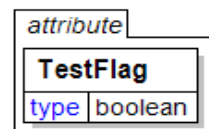
The version of a specification.

## SpecificationVersion [attribute]

The version of a specification.

TestFlag [attribute]

If "true" or "1" then this is a test transmission. If "false" or "0" then this transmission is for production use.

Time

Time in papiNetEnvelope should have one of the following formats.

- hh:mm:ss±hh:mm is used to represent a time with a time zone. The time zone is communicated as the number of hours offset from the Universal Time Coordinate (UTC), a.k.a. Greenwich Mean Time.

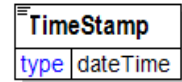- hh:mm:ssZ indicates the time at Zulu (another name for UTC).
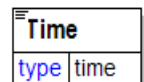
TimeStamp

The date and time e-business document, the payload, was prepared for transmission. The format and interpretation of Timestamp is the standard W3C xs:dateTime format.

TransmissionInfo

Information about the transmission. Each participant in the transmission process appends a new TransmissionInfo element indicating that they are the TransmissionSender and to who, the TransmissionReceiver, the XML message is being transmitted to.

(sequence)

The sequence of items below is mandatory. A single instance is required.

SequenceNumber

SequenceNumber is mandatory. A single instance is required.

The sequence of the item. Provides a mechanism for sorting.

ID

ID is mandatory. A single instance is required.

The unique identifier for the transmission. You can develop this identifier independently from other systems or you can use a similar identifier to one that you are currently using. For example, you could use something similar to the ISA control number in X12.

TimeStamp

TimeStamp is mandatory. A single instance is required.

The date and time e-business document, the payload, was prepared for transmission. The format and interpretation of Timestamp is the standard W3C xs:dateTime format.
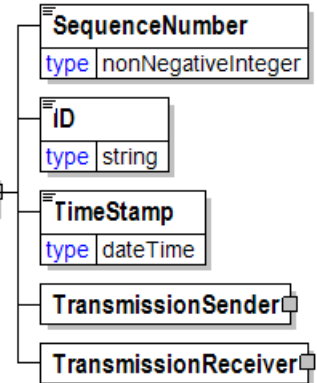
TransmissionSender

TransmissionSender is mandatory. A single instance is required.

The party responsible for transmitting the business document. This can be the same as the party issuing the business document or any handling service for the BusinessSender such as a portal, a hub, etc. depending on the set-up of communication services.
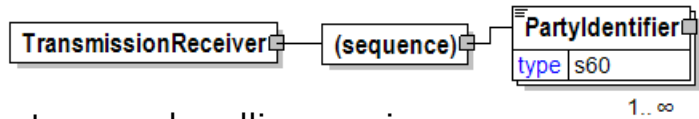
TransmissionReceiver

TransmissionReceiver is mandatory. A single instance is required.

The party responsible for the transmission receipt of the business document. This can be the party who will eventually process the content of the business document or any handling service for the BusinessReceiver such as a portal, a hub etc. depending on the set-up of communication services.

TransmissionReceiver

The party responsible for the transmission receipt of the business document. This can be the party who will eventually process the content of the business document or any handling service for the BusinessReceiver such as a portal, a hub etc. depending on the set-up of communication services.

(sequence)

The sequence of items below is mandatory. A single instance is required.
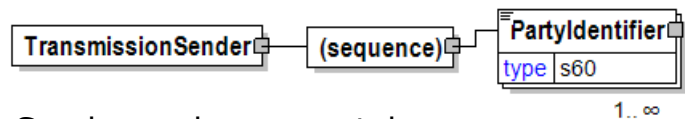
PartyIdentifier

PartyIdentifier is mandatory. One instance is required, multiple instances might exist.

A unique identifier of a specific party. This element contains an attribute PartyIdentifierType that indicates the type of party.

TransmissionSender

The party responsible for transmitting the business document. This can be the same as the party issuing the business document or any handling service for the BusinessSender such as a portal, a hub, etc. depending on the set-up of communication services.

(sequence)

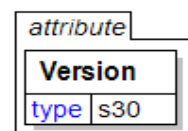*The sequence of items below is mandatory. A single instance is required.*

PartyIdentifier

PartyIdentifier is mandatory. One instance is required, multiple instances might exist.

A unique identifier of a specific party. This element contains an attribute PartyIdentifierType that indicates the type of party.
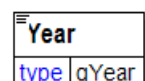
Version [attribute]

The version identifier for the schema. For papiNet schema the version is at the end of the schema file name and follows the format of VnRnn. The version can also be found in the version attribute of the root element as the beginning of the build number.

Year

Identifies the year number when communicating a calendar date.