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Calendar Documentation

Calendar e-Document Overview

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

The initial Calendar e-Document defines the opening times and/or contingencies for the given period. Further Calendar documents can update, or specify exceptions to for a given day or period.

Calendar Scope

This e-Document is used by consignor or consignee to forward information on opening times or contingencies of locations like warehouses, mills, plants etc. Typically, applicable to road and rail but may also apply to other transportation modes.
- communicate opening times (multiple for a weekday) for a certain location
- communicate contingencies at a certain location with slot times and quantity of contingent on lorry or tonnage base
- specify the validity time range of the calendar
- communicate updates on opening times or contingencies

Business Rules for Calendar

The following tables list the business rules that apply to each Calendar e-Document type. There are no general rules that apply to both e-Document types.

General Business Rules

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Business Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALENDAR_001</td>
<td>If CalendarEntryPeriod specifies a weekday, then DateTimeRange specifies the date range within which the given times and contingencies apply to the weekday.</td>
</tr>
<tr>
<td>CALENDAR_002</td>
<td>Opening times and contingencies in an original Calendar e-Document have to be explicitly defined. The default is that no contingencies are available.</td>
</tr>
<tr>
<td>CALENDAR_003</td>
<td>A Calendar e-Document with CalendarStatus = &quot;Amended&quot; can only contain CalendarEntry entries for days or ranges that need to be changed.</td>
</tr>
<tr>
<td>CALENDAR_004</td>
<td>A Calendar e-Document with CalendarStatus = &quot;Amended&quot; has to contain all slots for a given day or range in the specified CalendarEntry entries:</td>
</tr>
</tbody>
</table>
### Calendar
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<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
|   | • Set TimeSlotAvailability = "No" for the contingencies or opening times that have been removed  
   • Set TimeSlotAvailability = "Yes" for contingencies or opening times that are unchanged or added  

We use the term "all slots" to refer to each of the slots originally received in the "Original" Calendar e-Document for the given day or range.

| **CALENDAR_005** | The receiver of a Calendar e-Document with CalendarStatus ="Amended" has to process the TimeSlotInformation for every given day or period in the following way:  
• Only process TimeSlotInformation that refers to a date after the current system date. For example, when a CalendarEntryPeriod specifies "Monday" the system must only change the slots for future Mondays within the DateTimeRange.  
• Remove slots from the system whose attribute TimeSlotsAvailability = "No"  
• Add or update the contingencies on slots in the system whose TimeSlotAvailability is set to "Yes". |

| **CALENDAR_006** | If TransportModeType = "Road" and QuantityType = "Count" then the QuantityInformation value specifies the number of trucks that can load or unload at the given time. |

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**Understanding the Diagrams and Content**

This section provides a graphical view of the schema structures, a discussion of the item’s children. You can find additional information about papiNet and the standard at www.papiNet.org.

The graphics contain content model indicators, cardinality indicators, and data type information.

Associated with each graphic are the definitions for the parent item and any associated child items. All attributes are listed first, followed by the elements.

The following information should help you interpret and understand this standard. Please note the following:  
• Content Model and Cardinality operate together to determine if the
element or attribute are required in the instance document.
• The same attribute can never appear multiple times in the same
element so, you will never see a multiple cardinality indicator.

Content model indicators:
There are three possible types of content: “sequence”, “choice”, and “all”. The
papiNet standard currently does not use the “all” construct.
• (sequence)
  The sequence of the items to the right of the graphic (or below the text) is
  required.
• (choice)
  A choice of the items to the right of the graphic (or below the text) is permitted.
• (all)
  All the items to the right of the graphic are required.

Cardinality indicators:
• Dotted line around element or attribute.
  A single instance of the item can optionally exist.
• Dotted line around item with range indicated below.
  Multiple instances of the item can optionally exist.
• Solid line around item.
  A single instance of the item must exist.
• Solid line around item with range indicated below.
  At least one instance must exist; multiple instances can optionally exist.

Datatype indication:
When a data type is assigned to an element (either a simple type or complex
type the name of the data type is presented beneath the item name in the
graphic.
• In some cases additional information about the data type is presented
  (the default value).

Elements can either have content that is textual/numeric in nature or content
that is made up of additional elements and/or attributes.
• When the content is textual/numeric in nature “three straight horizontal
  lines” will appear in the upper left-hand corner of the graphic. Pay
  attention to these elements because they are where you will be entering
  your information.
• When the content is made up of additional elements and/or attributes a
  “gray-box” will appear on the right-hand side of the graphic.
• If the graphic shows both the horizontal lines and the gray-box then, in
  the papiNet standard, the content below the element are attributes.
Calendar e-Document

Calendar Root Element

Calendar

The Calendar element is the root element for the Calendar e-Document.

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

**CalendarType [attribute]**

*CalendarType is mandatory. A single instance is required.*

Identifies the intention of the entire Calendar e-Document.

*This item is restricted to the following list.*

- **LoadingSchedule**
  - The schedule for transport vehicle loading.

- **OfficeSchedule**
  - The schedule for office personnel.

- **SupportSchedule**
  - The support schedule for transport operations.

- **UnloadingSchedule**
  - The schedule for transport vehicle unloading.

**CalendarStatus [attribute]**

*CalendarStatus is optional. A single instance might exist.*

Identifies the status of the entire Calendar e-Document.

*This item is restricted to the following list.*

- **Amended**
  - The supplied information is changed.

- **Cancelled**
  - The supplied information has been cancelled. Items that have been cancelled are not included in totals on the summary levels of the e-document.

- **Original**
  - The supplied information is the first version of that information

**Language [attribute]**

*Language is optional. A single instance might exist.*

XML has embraced 2 and 3 digit language codes through the application of an addendum to the standard.

Information on the content of this attribute is available at http://www.loc.gov/standards/iso639-2/ this is the official site of the ISO 639-2 Registration Authority.
http://www.w3.org/International/O-HTML-tags.html provides an explanation of the errata updating XML.
http://www.ietf.org/rfc/rfc3066.txt is the key document that is referenced in the above errata.

(sequence)
The contents of (sequence) are mandatory. A single instance is required.

CalendarHeader
CalendarHeader is mandatory. A single instance is required.
A group item containing generic information applicable to the entire calendar.

CalendarSequence
CalendarSequence is mandatory. One instance is required, multiple instances might exist.
A group item containing information that relates to a line on the calendar.
Primary Elements

CalendarHeader

A group item containing generic information applicable to the entire Calendar.

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

CalendarNumber

CalendarNumber is mandatory. A single instance is required.

The sequential number that uniquely identifies the Calendar e-Document.

CalendarIssueDate

CalendarIssueDate is mandatory. A single instance is required.

The date and optionally time when the Calendar e-Document was created.

TransactionHistoryNumber

TransactionHistoryNumber is optional. A single instance might exist.

A sequential number that keeps track of the version of a document being sent by the document originator except in the case where TransactionHistoryConfirmation is used, in which case the TransactionHistoryNumber refers to the trigger transaction for which the confirmation is being sent.

RequestNumber

RequestNumber is optional. A single instance might exist.

A unique tracking number specifically identifying the InfoRequest e-Document to the originator. The tracking number is returned with the “information”, the answer, to help match the answer to the request.

SenderParty

SenderParty is mandatory. A single instance is required.

The business entity issuing the e-Document, the source of the document.

• The entity responsible for the content. If the sender party has outsourced the message service to a third party the SenderParty is the issuer of the e-Document and not the party performing the transmission service of the electronic message.

ReceiverParty

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

The business entity for whom the e-Document is intended, the destination of the document.

• The entity interested in the content. If the receiver party has outsourced the
message service to a third party the ReceiverParty is the intended party for the e-Document and not the party performing the receiving service of the electronic message.

**OtherParty**

*OtherParty is optional. Multiple instances might exist.*

An organisation or business entity other than those specifically detailed within a e-Document.

**AdditionalText**

*AdditionalText is optional. Multiple instances might exist.*

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

---

**CalendarSequence**

A group item containing information that relates to a line on the Calendar.

*(sequence)*

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

**CalendarSequenceNumber**

*CalendarSequenceNumber is mandatory. A single instance is required.*

The sequential number that uniquely identifies the Calendar sequence within the Calendar e-Document.

**LocationParty**

*LocationParty is mandatory. A single instance is required.*

The organization or business entity where the business event took place or will take place.

*(choice)*

*[choice] is optional because of choice construct.*

**SupplyPoint**

*SupplyPoint is optional because of choice construct.*

Grouping element that contains items describing a supply point. A SupplyPoint belongs to a LocationParty, e.g. in a DeliveryOrigin or DeliveryDestination, and describes where goods are stored and can be loaded or unloaded. A SupplyPoint can for example be a loading or unloading gate at a warehouse or a road side landing at a logging area in the forest.

**LocationCode**

*LocationCode is optional because of choice construct.*

A code used to identify a specific physical location within a site identified by a party, e.g. a loading station in a warehouse or an unloading station at a printer.
Calendar
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LocationCode will be deprecated in a future version. Use SupplyPoint instead of LocationCode.

TransportInformation
TransportInformation is optional. A single instance might exist.
A grouping element for transport information.

ValidityPeriod
ValidityPeriod is optional. A single instance might exist.
The validity period for a specific item, e.g. the validity period for an e-Document.

CalendarEntry
CalendarEntry is mandatory. One instance is required, multiple instances might exist.
Detailed description of the times and contingencies for the given LocationParty.

AdditionalText
AdditionalText is optional. Multiple instances might exist.
A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

CalendarEntry
Detailed description of the times and contingencies for the given LocationParty.

CalendarEntryPeriod [attribute]
CalendarEntryPeriod is mandatory. A single instance is required.
Describes the period applicable to a time slot to which the given times and contingencies apply.
This item is restricted to the following list.

- AllDays
- Monday
- Tuesday
- Wednesday
- Thursday

This item is restricted to the following list.
<table>
<thead>
<tr>
<th>Day</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday</td>
<td>Workdays Monday, Tuesday, Wednesday, Thursday and Friday excluding bank holidays (red days in the local calendar).</td>
</tr>
<tr>
<td>Saturday</td>
<td>Weekend Saturday and Sunday and bank holidays (red days in the local calendar).</td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
</tr>
</tbody>
</table>

**DateTimeRange**

To be deprecated in next version. Use enumeration AllDays instead.

**AdditionalText**

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

---

**TimeSlotInformation**

Description of the beginning and end of a time slot and the contingencies it contains.

---

**DateTimeRange**

Specifies a date and/or time range.
## Calendar Business Scenarios

### Calendar Scenario Listing

Examples of how times and contingencies are specified and changed with the calendar e-Document.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scenario A</strong></td>
<td>Original Calendar from the consignor or consignee to the carrier specifying office opening times</td>
</tr>
<tr>
<td><strong>Scenario B</strong></td>
<td>Original Calendar from the consignor or consignee to the carrier specifying contingencies for loading</td>
</tr>
<tr>
<td><strong>Scenario C</strong></td>
<td>Changes to the opening times for a given date range</td>
</tr>
<tr>
<td><strong>Scenario D1</strong></td>
<td>Changes to the contingencies for a specific day (e.g. because of a national holiday)</td>
</tr>
<tr>
<td><strong>Scenario D2</strong></td>
<td>Changes to the contingencies for a date range (e.g. because of holidays in August)</td>
</tr>
<tr>
<td><strong>Scenario D3</strong></td>
<td>Changes to the contingencies for a date range (e.g. changed amount of contingencies and slots)</td>
</tr>
</tbody>
</table>

#### Scenario A

<table>
<thead>
<tr>
<th>e-Document Type</th>
<th>Calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario</td>
<td>Original Calendar from the consignor to a carrier specifying office opening times</td>
</tr>
<tr>
<td>Outcome</td>
<td>Opening times are entered into the carriers system.</td>
</tr>
<tr>
<td>Initiator</td>
<td>Consignor</td>
</tr>
<tr>
<td>Receiver</td>
<td>Carrier</td>
</tr>
<tr>
<td>Preconditions</td>
<td>None</td>
</tr>
<tr>
<td>Trigger</td>
<td>None</td>
</tr>
<tr>
<td>Step 1.</td>
<td>Consignor sends Calendar e-Document</td>
</tr>
<tr>
<td></td>
<td>• CalendarType = “Office”</td>
</tr>
<tr>
<td></td>
<td>• TimeSlotAvailability = “Yes” for available opening times</td>
</tr>
</tbody>
</table>

#### Scenario B

<table>
<thead>
<tr>
<th>e-Document Type</th>
<th>Calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Any of the Calendar types.</td>
</tr>
</tbody>
</table>
**Scenario**
Original Calendar from the consignor to the carrier specifying contingencies for loading

**Outcome**
Contingencies are entered into the carriers system

**Initiator**
Consignor

**Receiver**
Carrier

**Preconditions**
None

**Trigger**
None

**Step 1.**
Consignor sends Calendar e-Document
- CalendarType = “Loading”
- TransportModeType = ”Road”
- QuantityType = “Count”

---

**Scenario C**

<table>
<thead>
<tr>
<th>e-Document</th>
<th>Calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Any of the Calendar types.</td>
</tr>
<tr>
<td><strong>Scenario</strong></td>
<td>Changes to the opening times for a given date range</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>The calendar inside the carriers system is updated</td>
</tr>
</tbody>
</table>

**Initiator**
Consignor

**Receiver**
Carrier

**Preconditions**
A original calendar for the given date range has to exist

**Trigger**
Consignor has changed the office hours for the given date range

**Step 1.**
Consignor sends Calendar e-Document
- CalendarType = “Office”
- DateTimeRange specifies for which dates the changes apply
- Set TimeSlotAvailability = “No” for opening times that have been removed
- Set TimeSlotAvailability = “Yes” for opening times that are unchanged or added

**Step 2.**
Carrier adjusts the stored opening times for the given dates
### Scenario D1

<table>
<thead>
<tr>
<th>e-Document</th>
<th>Calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Any of the Calendar types.</td>
</tr>
<tr>
<td>Scenario</td>
<td>Changes to the contingencies for a specific day (e.g. because of a national holiday)</td>
</tr>
<tr>
<td>Outcome</td>
<td>The calendar inside the carriers system is updated</td>
</tr>
<tr>
<td>Initiator</td>
<td>Consignor</td>
</tr>
<tr>
<td>Receiver</td>
<td>Carrier</td>
</tr>
<tr>
<td>Preconditions</td>
<td>A original calendar for the given date range has to exist</td>
</tr>
<tr>
<td>Trigger</td>
<td>Consignor has changed the contingencies for the given date range</td>
</tr>
</tbody>
</table>
| **Step 1.** | Consignor sends Calendar e-Document  
  • CalendarType = "Loading"  
  • DateTimeRange specifies for which dates the changes apply  
  • Set TimeSlotAvailability = "No" for contingencies that have been removed  
  • Set TimeSlotAvailability = "Yes" for contingencies that are unchanged or added |
| **Step 2.** | Carrier adjusts the stored contingencies for the given dates |

### Scenario D2

<table>
<thead>
<tr>
<th>e-Document</th>
<th>Calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Any of the Calendar e-Document types.</td>
</tr>
<tr>
<td>Scenario</td>
<td>Changes to the contingencies for a date range (e.g. because of a holidays in August)</td>
</tr>
<tr>
<td>Outcome</td>
<td>The calendar inside the carriers system is updated</td>
</tr>
<tr>
<td>Initiator</td>
<td>Consignor</td>
</tr>
<tr>
<td>Receiver</td>
<td>Carrier</td>
</tr>
<tr>
<td>Preconditions</td>
<td>A original calendar for the given date range has to exist</td>
</tr>
</tbody>
</table>
| Trigger    | Consignor has changed the contingencies for the
Step 1. Consignor sends Calendar e-Document
- CalendarType = “Loading”
- DateTimeRange specifies for which dates the changes apply
- Set TimeSlotAvailability = “No” for contingencies that have been removed
- Set TimeSlotAvailability = “Yes” for contingencies that are unchanged or added

Step 2. Carrier adjusts the stored contingencies for the given dates

Scenario D3

<table>
<thead>
<tr>
<th>e-Document</th>
<th>Calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Any of the Calendar types.</td>
</tr>
<tr>
<td>Scenario</td>
<td>Changes to the contingencies for a date range (e.g. changed amount of contingencies and slots)</td>
</tr>
<tr>
<td>Outcome</td>
<td>The calendar inside the carriers system is updated</td>
</tr>
<tr>
<td>Initiator</td>
<td>Consignor</td>
</tr>
<tr>
<td>Receiver</td>
<td>Carrier</td>
</tr>
<tr>
<td>Preconditions</td>
<td>A original calendar for the given date range has to exist.</td>
</tr>
<tr>
<td>Trigger</td>
<td>Consignor has changed the contingencies for the given date range</td>
</tr>
</tbody>
</table>

Step 1. Consignor sends Calendar e-Document
- CalendarType = “Loading”
- DateTimeRange specifies for which dates the changes apply
- Set TimeSlotAvailability = “No” for contingencies that have been removed

Step 2. Carrier adjusts the stored contingencies for the given dates