



**papiNet**

**Planning**

**papiNet Standard - Version 2.31**

**Documentation**

**Global Standard for the Paper and Forest  
Products Supply Chain**

**Build V2R31\_20201021**

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# Planning

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# Planning

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### Planning Documentation

#### Planning e-Document Overview

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.

The recipient of the e-Document could use the Planning e-Document to validate their understanding of the sender's demand. In situations where lead times are very short, for example a Just-In-Time (JIT) arrangement, the intent is to facilitate the matching of supply to demand.

The Planning e-Document can be used in a variety of ways:

- A supplier can communicate a production plan that would include purchase order and shipment detail information.
- A printer can communicate anticipated aggregated usage at a facility to aid the supplier to better plan logistics.
- The Planning e-Document could release against a blanket purchase order or a contract to support various replenishment models or, situations where paper is produced to satisfy communicated demand without issuing a separate purchase order.
- Typically, trading partners send Planning e-Documents on a frequency or event basis agreed between them.

For the purposes of the Planning e-Document, a plan is:

- production of, requirements for, or delivery of a product.
- aggregated in time-periods.
- for a location or group of locations.

Where:

- product defines the item for which the quantities are specified populated by different types of orders, job specifications, or planned shipments that consume the capacity.
- time-period defines the time intervals for which quantities are specified.
- location defines the physical point in the supply chain.

#### PlanningProcessType [attribute]

The type of process that the Planning e-Document communicates.

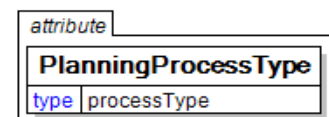
*This item is restricted to the following list.*

##### Consumption

Consumed in manufacturing.

##### DeliveryReceipt

Delivered to the ship-to location.



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### **Despatch**

Ready to shipped.

### **Inventory**

In available inventory at the storage location.

### **Production**

The quantity added to stock through a manufacturing or conversion process.

### **Sales**

A purchase order has been placed for the product.

---

## **The Scope of Planning e-Document**

The Planning e-Document must include the following information:

- A Planning Process Type of either "Consumption", "Delivery Receipt", "Despatch", "Inventory", "Production", or "Sales"
- A Planning e-Document Number and Line Number for identification of the document and its lines.
- A Planning Issue Date for when this e-Document was created.
- A Location Party
- Product or Downtime information
- A Planning Bucket that communicates the Time Period and Quantity
- A Bucket Type of either "Actual", "Budget", "Demand", or "Forecast".

The Planning e-Document can communicate the following information:

- A plan for multiple products and locations by repeating the Planning Line Item.
- A plan for Multiple machines at each location by repeating the Planning Line Item.
- Product and manufacturing details such as width, diameter, pallet size, and rates.
- Details of the purchase orders, supplier orders, jobs, or loads that make up the plan or forecast.

---

## **Business Rules for Planning**

### **General Planning Business Rules**

The following table lists the business rules that apply to the Planning e-Document.

| <b>Identifier</b> | <b>Business Rule</b>  |
|-------------------|---|
| <b>PL001</b>      | Planning e-Documents cannot be cancelled. Updates are sent as a new e-Document that overwrites previous data based upon the combination of Planning identifier, product, location, and time period. |
| <b>PL002</b>      | For a single Planning line item the units of measure  |

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|              |   |
|--------------|---|
|              | for Quantity must be the same.  |
| <b>PL003</b> | The quantities and related information for a time period are valid until updated by a future Planning e-Document. |
| <b>PL004</b> | The location for which the plan applies is specified at the line item level.                                      |

### General Planning Structure Rules

The following is a list of structure rules that apply to the Planning e-Document.

| <b>Identifier</b> | <b>Business Rule</b>   |
|-------------------|--|
| <b>PL005</b>      | A Planning e-Document can have multiple line items.                |
| <b>PL006</b>      | A Planning e-Document must reference either a Product or Downtime. |

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### Processing the Planning e-Document

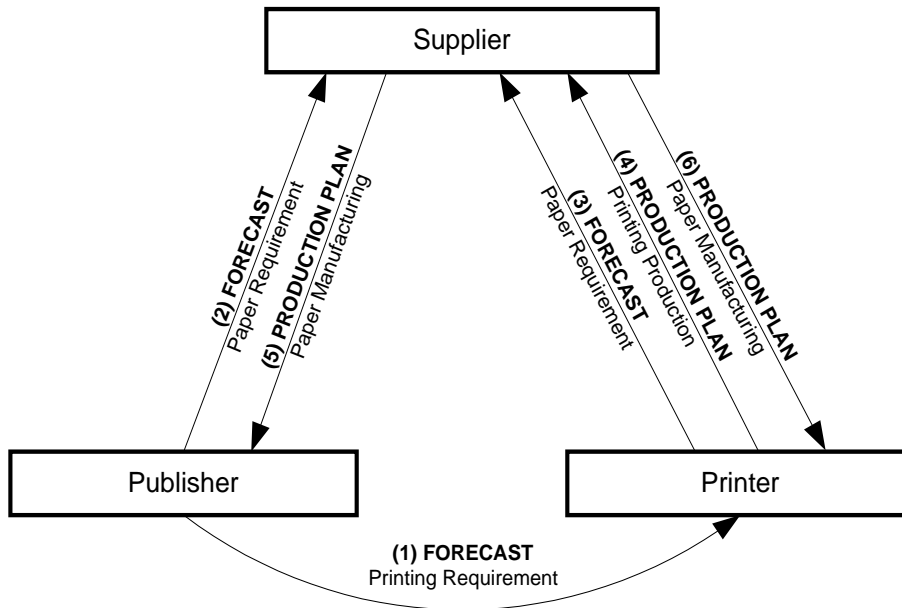
Prior to implementing business processes that require a Planning e-Document, it is necessary for the parties involved to have already opened a dialogue and have a trading partner agreement (TPA) in place. Such an agreement would include frequency of e-Documents, content detail, units of measure, etc.

The Planning e-Document does not have an attribute to indicate if the e-Document is new, updated, or cancelled. Because a production plan by its nature is updated and extended as time passes, every Planning e-Document, for a given Planning Identifier, is considered to be an update that overlays the previous e-Document.

Planning information is dynamic and ever changing. New combinations of the Planning parameters will exist over time. The proper handling of these new combinations should occur. This allows the plan to grow and extend over time.

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## Graphical Representation of a Replenishment Model Process using the Planning e-Document



### Pointers for possible collaboration agreements

- Frequency of Planning e-Documents or triggers that cause the Planning e-Document to be issued.
- Planning horizon, that is, how far out does the Planning go.
- Planning period, that is, daily, weekly, or monthly.
- The process type, product, location, and identifier combinations that define the context of the Planning data.

| Transaction     | Supplier | Publisher | Printer  | Comment  |
|-----------------|----------|-----------|----------|--|
| Forecast<br>(1) |          | initiates | receiver | Publisher sends a printing requirement forecast to several printers for the jobs they plan to print. <ul style="list-style-type: none"> <li>• The forecast would include only the jobs planned to be printed by the</li> </ul> |

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|                     |          |           |           |  |
|---------------------|----------|-----------|-----------|--|
|                     |          |           |           | printer receiving the forecast.  |
| <b>Forecast (2)</b> | receiver | initiates |           | <p>Publisher sends paper requirement forecast to several suppliers for the jobs they plan to print.</p> <ul style="list-style-type: none"> <li>• The forecast might include jobs for several printers.</li> <li>• The forecast only includes the paper requirements from the suppliers receiving the forecast</li> </ul> |
| <b>Forecast (3)</b> | receiver |           | initiates | <p>Printer sends paper requirement forecast to supplier for the jobs they are planning to print.</p> <ul style="list-style-type: none"> <li>• The forecast might</li> </ul>  |



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|                            |          |  |           |   |
|----------------------------|----------|--|-----------|---|
|                            |          |  |           | include jobs for several publishers.  |
| <b>Production Plan (4)</b> | receiver |  | initiates | <p>Printer sends a printing production plan to the supplier about the jobs they are planning to print.</p> <ul style="list-style-type: none"> <li>• The production plan might include jobs for several publishers and jobs where the printers order paper for their own jobs.</li> <li>• The production plan only includes the jobs where the supplier receiving the production plan supplies the paper.</li> <li>• The production plan is</li> </ul> |

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|                            |           |          |          |  |
|----------------------------|-----------|----------|----------|--|
|                            |           |          |          | more accurate than the forecast.   |
| <b>Production Plan (5)</b> | initiates |          | receiver | The supplier sends a paper manufacturing production plan to the publisher. |
| <b>Production Plan (6)</b> | initiates | receiver |          | The supplier sends paper manufacturing production plan to printer.         |

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### Use of Planning Reference for job related information.

By using a common PlanningReference to specify a job title and repeating PlanningLineItem with different products, the Planning e-Document could specify the bill of materials for the particular job.

#### A Planning example:

- PlanningLineItem
  - ReferenceType = JobId + IssueOrEventID
  - PlanningReference = "Shakespeare's Compleat Works"
  - Product ProductIdentifier is OldEnglishBookPaper
- PlanningLineItem
  - ReferenceType = JobId + IssueOrEventID
  - PlanningReference = Shakespeare's Compleat Works
  - Product ProductIdentifier is MottledBookCover
- PlanningLineItem
  - ReferenceType = JobId + IssueOrEventID
  - PlanningReference = Shakespeare's Compleat Works
  - Product ProductIdentifier is BlackInk

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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](http://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

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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.

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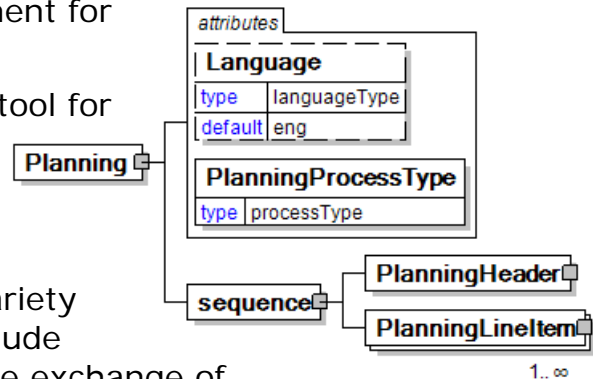
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### Planning Root Element

#### Planning

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

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.



#### Language [attribute]

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

The valid Alpha 2- and Alpha 3-character list of language codes in the ISO 639-1 and 639-2 international standards.

Information on the content of this attribute is available at:  
[https://www.loc.gov/standards/iso639-2/php/code\\_list.php](https://www.loc.gov/standards/iso639-2/php/code_list.php)

#### PlanningProcessType [attribute]

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

The type of process that the Planning e-Document communicates.

*This item is restricted to the following list.*

##### Consumption

Consumed in manufacturing.

##### DeliveryReceipt

Delivered to the ship-to location.

##### Despatch

Ready to shipped.

##### Inventory

In available inventory at the storage location.

##### Production

The quantity added to stock through a manufacturing or conversion process.

##### Sales

A purchase order has been placed for the product.

#### (sequence)

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

##### PlanningHeader

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

Information that applies to all the items on the Planning e-Document.

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### **PlanningLineItem**

*PlanningLineItem is mandatory. One instance is required, multiple instances might exist.*

The PlanningLineItem must reference either a Product or Downtime. The PlanningLineItem presents information for a particular product or downtime event.

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### Primary Elements

#### PlanningHeader

Information that applies to all the items on the Planning e-Document.

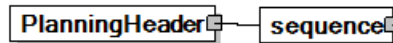
**(sequence)**

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

##### PlanningMessageNumber

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

A unique identifier assigned to the Planning e-Document assigned by the issuer that makes this Planning unique. Subsequent Planning e-Documents with updates will use this same



PlanningMessageNumber.

##### PlanningIssueDate

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

The date and time this version of the Planning data was issued.

##### PlanningIdentifier

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

An identifier that communicates the scope or content of the planning. This field is used to communicate which sub-set of planning information is being maintained.

##### 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 optional. A single instance might exist.*

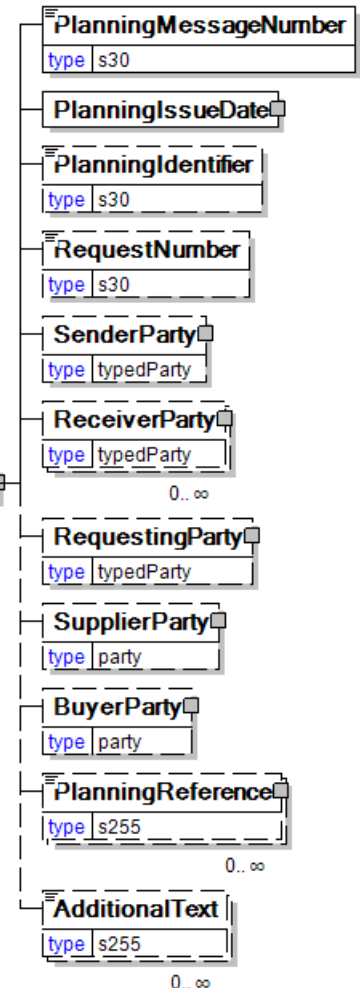
The business entity issuing the business document, the source of the document.

- This is the same entity as the "From" party in the ebXML message service envelope. The entity responsible for the content. If the sender party has outsourced the transmission function to a third party the sender party is the original party not the party performing the transmission service.

##### ReceiverParty

*ReceiverParty is optional. Multiple instances might exist.*

The business entity for whom the business document is intended, the destination of



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the document.

- This is the same entity as the "To" party in the ebXML message service envelop. The entity interested in the content. If the receiver party has outsourced the message receipt function to a third party the receiver party is the intended party not the party performing the receiving process.

### **RequestingParty**

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

The party requesting the information.

### **SupplierParty**

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

The organisation or business entity responsible for providing the product.

SupplierParty is also the seller of the product, if Seller is not specified as OtherParty = Seller.

### **BuyerParty**

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

The legal entity to which the product is sold. Also commonly referred to as the sold-to party or customer. If no OtherParty is defined as the Payer, the Buyer is the Payer.

### **PlanningReference**

*PlanningReference is optional. Multiple instances might exist.*

An element detailing relevant references pertaining to the Planning and DeliveryPlanning e-Documents.

### **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.



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## PlanningLineItem

The PlanningLineItem must reference either a Product or Downtime. The PlanningLineItem presents information for a particular product or downtime event.

### PrintType [attribute]

Defines the printing method.

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

*This item is restricted to the following list.*

#### ColdsetOffset

An offset printing method suitable for newspapers, in other words, ink dries by penetration into the paper.

#### ContinuousForms

An offset printing method, generally without a hot drying section and suitable for reels.

#### Digital

An electrostatic printing method, typically a large black-and-white or multicolour printer/copier.

#### Flexography

A special printing method, which is a follow-up of letter print with advanced print cylinder surface. Suitable for sheets.

#### FoilPrint

A special printing/finishing method suitable for foils through embossed print plate/cylinder; flat/flat, or circle/flat (form to sheet).

#### Forms

An offset printing method, generally without a hot drying section and suitable for sheets.

#### Gravure

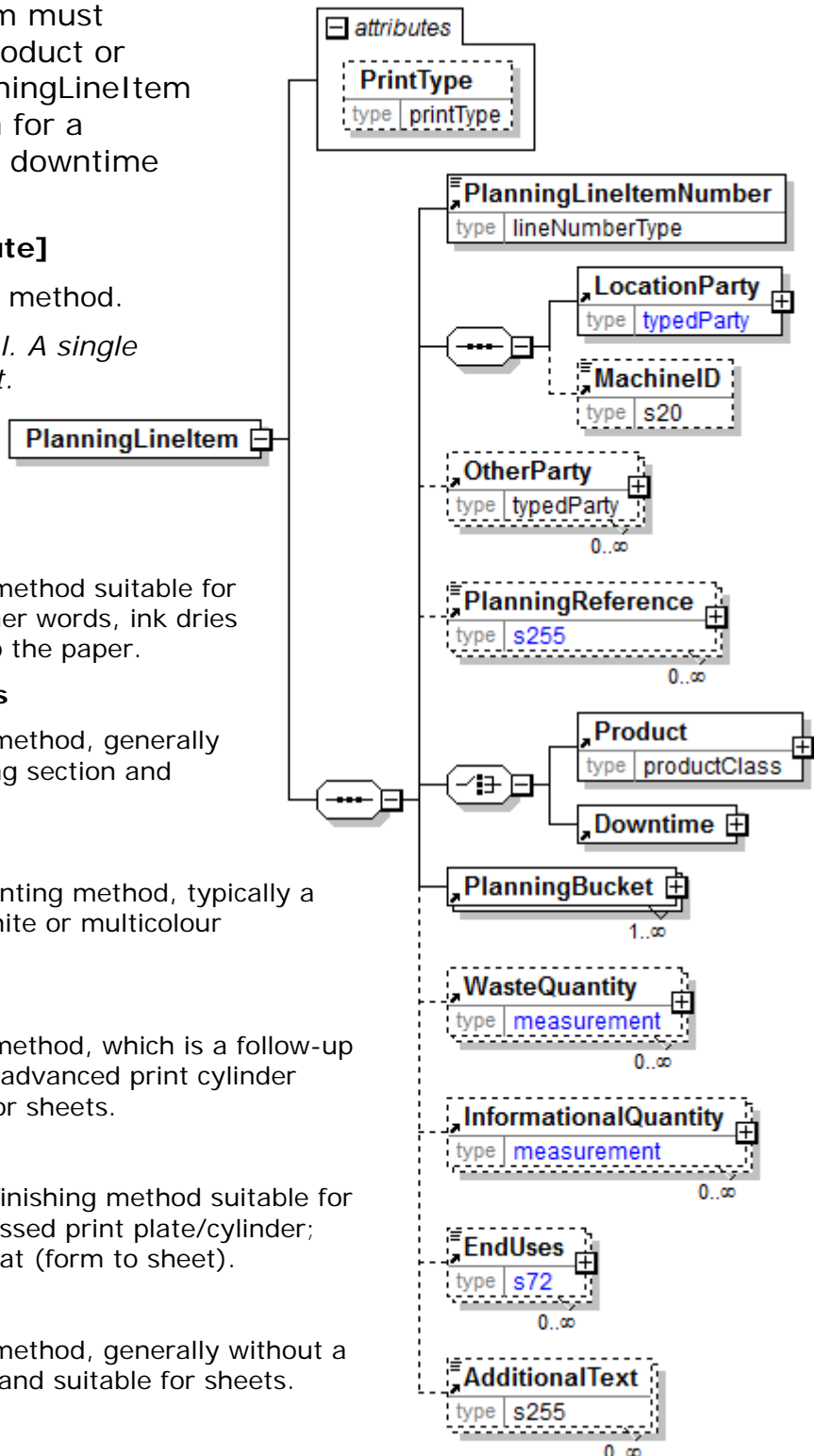
A standard printing method with embossed print cylinders. Suitable for sheets.

#### HeatsetOffset

An offset printing method.

#### InkJet

An inkjet printing method, typically a large black-and-white or multicolour printer.



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### **InstantOffset**

A standard flat printing method (for example, wet offset, or waterless offset) suitable for small print orders and small sheet sizes (for example, max. DIN A3).

### **Laser**

A laser-based printing method, typically a large black-and-white or multicolour printer/copier.

### **Letterpress**

A special printing method suitable for books or newspapers (old style) with advanced letters. Suitable for sheets.

### **LightPrint**

- A printing method similar to a facsimile print, a photo-like print with a specific prepared cylinder surface on photo basis or an artificial print.

### **MiniWeb**

A digital printing method suitable for reels less than 20 inch wide.

### **RotoFlexography**

### **RotoGravure**

### **RotoLetterpress**

### **RotoSilkScreen**

### **SheetfedOffset**

### **SilkScreen**

### **WebOffset**

### **(sequence)**

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

### **PlanningLineItemNumber**

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

A sequential number that uniquely identifies the PlanningLineItemNumber.

### **LocationParty**

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

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

### **MachineID**

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

An identifier assigned to the particular machine being referenced. For example, a machine could be a paper machine, an off-line coater, a sheeter, or a printing press. The particular machine being referenced will be determined by the business event being supported.

### **OtherParty**

*OtherParty is optional. Multiple instances might exist.*

An organisation or business entity other than those specifically detailed within a business document.

### **PlanningReference**

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*PlanningReference is optional. Multiple instances might exist.*

An element detailing relevant references pertaining to the Planning and DeliveryPlanning e-Documents.

### **(choice)**

*[choice] is mandatory. A single instance is required.*

### **Product**

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

Product is a group item defining the article and its characteristics. Product is used to specify product characteristics organized by ProductIdentifier, ProductDescription, and Classification. Book Manufacturing, Label Stock, Paper, Pulp, Recovered Paper, Wood Products, and Virgin Fibre market segments have defined their product characteristics and conversion features for implementation in papiNet.

### **Downtime**

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

An element used to communicate when equipment is not available for manufacturing purposes.

### **PlanningBucket**

*PlanningBucket is mandatory. One instance is required, multiple instances might exist.*

PlanningBucket groups together the elements required to communicate the time and quantity related information for the parent item (either Product or Downtime).

### **WasteQuantity**

*WasteQuantity is optional. Multiple instances might exist.*

The quantity of product wasted.

### **InformationalQuantity**

*InformationalQuantity is optional. Multiple instances might exist.*

A quantity given in a valid UOM used for information purposes only (not for calculation). For example, an ordered quantity was 100 reels as opposed to the invoice quantity of 20,000 pounds.

### **EndUses**

*EndUses is optional. Multiple instances might exist.*

A text element used to express in human readable form a list of applicable end uses for a product. Examples of end uses are:

- Magazine
- Book
- Commercial print
- etc

### **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.

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## Planning Business Scenarios

### Planning Scenario Listing

|                   |  |
|-------------------|--|
| <b>Scenario A</b> | Single Location Forecast   |
| <b>Scenario B</b> | Multiple Location Forecast   |
| <b>Scenario C</b> | Production Plan with Gaps  |
| <b>Scenario D</b> | Production Plan with Downtime  |
| <b>Scenario E</b> | Forecast with Job Run Rates  |
| <b>Scenario F</b> | Publisher, Printer, and Supplier Rolling Plan  |
| <b>Scenario G</b> | Rolling Plan with Demand and Forecast  |
| <b>Scenario H</b> | Mill Production Plan <ul style="list-style-type: none"> <li>• More detailed than original forecast.</li> </ul> |

### Scenario A - Single Location Forecast

|                   |   |
|-------------------|---|
| <b>e-Document</b> | Planning  |
| <b>Type</b>       | Consumption   |
| <b>Scenario</b>   | A Buyer sends an annual forecast to a paper supplier for three grades of product. Each grade includes quarterly projections for product consumption. The product will be shipped to one location.   |
| <b>Outcome</b>    | The annual forecast is placed in the supplier's ERP system.   |
| <b>Initiator</b>  | Buyer   |
| <b>Receiver</b>   | Supplier  |
| <b>XML File</b>   | Planning_ScenarioA.xml <ul style="list-style-type: none"> <li>• Focus on PlanningLineItem</li> </ul>  |
| <b>Trigger</b>    | The annual planning process triggers the Planning e-Document that is sent with forecasted values.   |
| <b>Step 1.</b>    | The buyer updates their production plan and sends the Planning e-Document to their supplier. <ul style="list-style-type: none"> <li>• There are a total of three line items, one for each grade.</li> <li>• Each grade has four buckets of data, one for each quarter.</li> </ul> |
| <b>Results</b>    | The supplier stores the information in their  |

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|  |  |
|--|--|
|  | system. The supplier uses the information to update their own production forecast, now knowing product will be required. |
|--|--|

### Scenario B - Multiple Location Forecast

|                   |  |
|-------------------|--|
| <b>e-Document</b> | Planning   |
| <b>Type</b>       | Consumption  |
| <b>Scenario</b>   | A publisher has planned for paper consumption for the next year in quarterly buckets. This plan is for the multiple printer locations to which the paper will be sent. The publisher sends the plan to the paper manufacturer by paper grade. Using this information the paper manufacturer can plan their manufacturing and delivery of the various grades. |
| <b>Outcome</b>    | A Planning e-Document is generated by the publisher's system and received into the paper manufacturer's system.  |
| <b>Initiator</b>  | Publisher  |
| <b>Receiver</b>   | Paper Manufacturer   |
| <b>XML File</b>   | Planning_ScenarioB.xml   |
| <b>Trigger</b>    | Publisher quarterly planning process   |
| <b>Step 1.</b>    | The publisher executes their quarterly planning process to determine paper requirements by paper grade.  |
| <b>Step 2.</b>    | The publishers sends the plan to the paper manufacturer via the Planning e-Document.   |
| <b>Step 3.</b>    | The paper manufacturer stores the information from the Planning e-Document in their system.  |
| <b>Results</b>    | The paper manufacturer stores the information in their system. They use the information to update their own production plan, now knowing what paper grades will be required by the publisher and approximately when.   |

### Scenario C - Production Plan with Gaps

|                   |  |
|-------------------|--|
| <b>e-Document</b> | Planning   |
| <b>Type</b>       | Production                                       |
| <b>Scenario</b>   | A supplier reports the production plan to buyer. |

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|                  |   |
|------------------|---|
| <b>Outcome</b>   | A Planning e-Document is generated by the Supplier's system and received into the Buyer's system.   |
| <b>Initiator</b> | Supplier  |
| <b>Receiver</b>  | Buyer   |
| <b>XML File</b>  | Planning_ScenarioC.xml  |
| <b>Trigger</b>   | The buyer requests certain product with Information Request e-Document. (Need to be validated). Reporting period needed.  |
| <b>Step 1.</b>   | Supplier records a Planning e-Document into their system then sends it to the Buyer. At a minimum, all required elements and corresponding attributes are recorded. |
| <b>Results</b>   | The Customer responds with a BusinessAcknowledgement e-Document after the Planning e-Document has been accepted into the Customer's system.                         |

### Scenario D - Production Plan with Downtime

|                   |   |
|-------------------|---|
| <b>e-Document</b> | Planning  |
| <b>Type</b>       | Production  |
| <b>Scenario</b>   | The printing plant sends to the mill a PurchaseOrder for reels. This includes specifications from the ProductIdentifier. The mill response is OrderConfirmation. • At a later date, the mill sends to a printing plant the Planning e-Document for reels according to the information sent in the original order. • The Planning e-Document includes a PlanningLineItem which contains product characteristics. • Using this information the printer knows which source reels should be allocated warehouse space and when the reels will be available. • Downtime is communicated within the Planning e-Document as a downtime line item. • Later the mills sends to the printing plant the DeliveryMessage for the reels. |
| <b>Outcome</b>    | A Planning e-Document is generated by the mill's MES system and sent to the printer's system.   |

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|                      |   |
|----------------------|---|
| <b>Initiator</b>     | Mill  |
| <b>Receiver</b>      | Printing Plant  |
| <b>Preconditions</b> | What exists prior to the start?   |
| <b>XML File</b>      | The name of any sample file.  |
| <b>Trigger</b>       | Original customer order included in mill's production plan  |
| <b>Step 1.</b>       | <p>The mill updates their production plan and sends the Planning e-Document to the printer whenever there is a change to a customer order.</p> <ul style="list-style-type: none"> <li>• PlanningType – Plan</li> <li>• PlanningProcessType – Production</li> <li>• BucketType – Forecast</li> <li>• PlanningReferenceType – PurchaseOrderNumber</li> <li>• PlanningReferenceType – MillRunNumber</li> <li>• This is the mills internal number for source reels.</li> <li>• LocationParty – My Favorite Printer</li> <li>• Product – SIMCOTE</li> <li>• TimePeriod – Week</li> <li>• Quantity – 60 Tons</li> </ul> |
| <b>Results</b>       | The printing plant stores the information in their system. The converter uses the information to update their own production plan, now knowing when source reels for sheeting of customer orders will be available.   |

### Scenario E - Forecast with Job Run Rates

|                   |   |
|-------------------|---|
| <b>e-Document</b> | Planning  |
| <b>Type</b>       | Consumption   |
| <b>Scenario</b>   | A printer sends a weekly consumption forecast to a supplier by printing jobs with product, gross requirements and consumption rate. |
| <b>Outcome</b>    | A Planning e-Document is generated by the Printer's system and received into the Supplier's system.                                 |
| <b>Initiator</b>  | Printer   |
| <b>Receiver</b>   | Supplier  |

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|----------------------|--|
| <b>Preconditions</b> | What exists prior to the start?  |
| <b>XML File</b>      | The name of any sample file.   |
| <b>Trigger</b>       | Trigger  |
| <b>Step 1.</b>       | <p>Printer records a Planning e-Document into their system then sends it to the Supplier. At a minimum, all required elements and corresponding attributes are recorded.</p> <p>The printer reports a forecast for the next agreed upon weeks indicating anticipated jobs, grades, quantities and consumption rate.</p> <ul style="list-style-type: none"> <li>• PlanningProcessType – Consumption</li> <li>• PlanningLineItemNumber – 1 / job and grade</li> <li>• LocationParty – Printing plant</li> <li>• Product – Paper Grade name</li> <li>• TimePeriod – Week</li> <li>• Quantity – Gross weight</li> <li>• InformatinalQuantity – Run rate in gross pounds per day</li> </ul> |
| <b>Results</b>       | The Supplier responds with a Business Acknowledgement e-Document after the Planning e-Document has been accepted into the Supplier's system.   |

### Scenario F - Publisher, Printer, and Supplier Rolling Plan

|                   |   |
|-------------------|---|
| <b>e-Document</b> | Planning  |
| <b>Type</b>       | Production  |
| <b>Scenario</b>   | This Use Case assumes the Publisher, Printer, and Supplier have previously agreed on a weekly time period and that the Supplier guarantees that at least 2 weeks of a particular product will always be available, onsite at a Printing Location. |
| <b>Outcome</b>    | Supplier uses Weekly Forecast of Publishing Paper needs plus the Printer Production Plan and Inventory Status to guarantee that 2 weeks of a particular product are always available at a particular printing location.                           |
| <b>Initiator</b>  | Publisher, Printer and Supplier   |
| <b>Receiver</b>   | Publisher, Printer and Supplier   |



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|----------------------|--|
| <b>Preconditions</b> | What exists prior to the start?  |
| <b>XML File</b>      | <ul style="list-style-type: none"> <li>• Planning_ScenarioF_Step1.xml</li> <li>• Planning_ScenarioF_Step2.xml</li> </ul>   |
| <b>Trigger</b>       | Annual budget Planning preparation or revision is completed by the Customer.   |
| <b>Step 1.</b>       | Publisher sends a Forecasted use of a particular product by week for the next 6 weeks to the Printer and Supplier.   |
| <b>Step 2.</b>       | <p>On a daily basis, the Printer publishes their consumption plan to satisfy print requirements for a particular Publisher magazine. 7 days are included in the example.</p> <p>They also supply an Inventory Status that tells the Supplier how much of a product is on hand. See the inventory status for how to format this e-Document.</p> |
| <b>Results</b>       | The Supplier uses the Printer Production Plan, the Printer supplied Inventory Status, the Publisher supplied Forecast Plan, shipment times, and the replenishment product plan to rationalize manufacture and delivery of product.   |

### Scenario G - Rolling Plan with Demand and Forecast

|                   |   |
|-------------------|---|
| <b>e-Document</b> | Planning  |
| <b>Type</b>       | Consumption   |
| <b>Scenario</b>   | <p>A Supplier sends to a Terminal Operator (need to define "Terminal Operator") weekly demand for 40 foot Container requirements for the next two weeks, and a forecast of requirements for the following two weeks at a Mill loading bay.</p> <p>The weekly Demand is authority to supply the requirements as specified to the location indicated in the e-Document. The Forecast requirements are an estimate of needs further out in time and are provided to the Terminal Operator for planning purposes. As each week passes, the Forecast requirements become Demand and the new plan is sent to the Terminal Operator.</p> |

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|----------------------|---|
| <b>Outcome</b>       | The Terminal Operator in this scenario is responsible for supplying the container requirements of the Supplier. The outcome of this use case is for the Terminal Operator to have the information necessary to supply the Suppliers requirements.   |
| <b>Initiator</b>     | Supplier  |
| <b>Receiver</b>      | Terminal Operator   |
| <b>Preconditions</b> | This Use Case assumes the Supplier and Terminal Operator have previously agreed the time period size, Quantity UOM, and how frequently, or on what basis, the e-Document should be sent.  |
| <b>XML File</b>      | Planning_ScenarioG.xml  |
| <b>Trigger</b>       | Supplier prepares or revises equipment requirements demand forecast.  |
| <b>Step 1.</b>       | Supplier sends a rolling Consumption Planning e-Document to the Terminal Operator for a particular type of container at a particular location.<br><br>Statuses sent within the e-Document: <ul style="list-style-type: none"> <li>• PlanningProcessType = 'Consumption'</li> </ul>  |
| <b>Step 2.</b>       | Terminal Operator updates their information systems. <ul style="list-style-type: none"> <li>• Note: This e-Document may contain new PlanningBuckets not already in the Terminal Operator's information system. This may require the Terminal Operators system to create new planning 'records' for the different combinations of information contained within the e-Document, effectively extending any previous information the Terminal Operator may already have.</li> </ul> |
| <b>Step 3.</b>       | The Terminal Operator may respond to the Supplier with a BusinessAcknowledgement e-Document informing the Supplier that the Planning e-Document was successfully processed.   |

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### Scenario H - Mill Production Plan

|                      |  |
|----------------------|--|
| <b>e-Document</b>    | Planning   |
| <b>Type</b>          | Indicate the e-Document type, if any.  |
| <b>Scenario</b>      | <p>This scenario describes a case where a mill uses an outside converting plant to cut the sheets and create the pallets for delivery to a customer.</p> <ul style="list-style-type: none"> <li>• A mill sends to a converting plant an order for converting reels to sheets. The order includes information relevant to the converting plant from the customer's purchase order to the mill; including among other things converting order number, customer's purchase order number, delivery schedule, product specifications like customer order number, size and packaging.</li> <li>• A mill sends to a converting plant its production plan for the source reels to be sheeted. The production plan contains among other things: <ul style="list-style-type: none"> <li>• the mill's internal order number for production of the source reels to be used for sheeting</li> <li>• the customer's purchase order number</li> <li>• the physical properties of the reels; size <ul style="list-style-type: none"> <li>• Using the information from the customer's purchase order and the production plan the converting plant now knows which source reels should be used for which customer orders and when the source reels will be available.</li> </ul> </li> </ul> </li> </ul> |
| <b>Outcome</b>       | A Planning e-Document is generated by the mill's MES system and received into the sheet converter's system.  |
| <b>Initiator</b>     | Mill   |
| <b>Receiver</b>      | Converting plant   |
| <b>Preconditions</b> | What exists prior to the start?  |
| <b>XML File</b>      | The name of any sample file.   |
| <b>Trigger</b>       | Customer's purchase order is included in mill's production plan.   |
| <b>Step 1.</b>       | The mill updates their production plan and sends the Planning e-Document the converting plant whenever there is a change to a customer order that will be sheeted by the converter.  |

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|                |  |
|----------------|--|
|                | <ul style="list-style-type: none"> <li>• PlanningType – Baseline</li> <li>• PlanningProcessType – Production</li> <li>• PlanningType – Plan</li> <li>• SenderParty – The Mill</li> <li>• ReceiverParty – The Converting Plant</li> <li>• PlanningMessageNumber</li> <li>• PlanningLineItemNumber – 1</li> <li>• ForecastDemandType – Forecast</li> <li>• PlanningReference –<br/>SupplierReferenceNumber</li> <li>• PlanningReference – PurchaseOrderNumber</li> <li>• LocationParty – The Same Mill</li> <li>• Product – Source reels for sheeting</li> <li>• BasisWeight – 80 Grams / m2</li> <li>• ReelWidth – 1275 millimeter</li> <li>• ReelDiameter – 1150 millimeter</li> <li>• Reellength – 6500 meter</li> <li>• TimePeriod – date of production run</li> <li>• Quantity – number of reels</li> </ul> |
| <b>Results</b> | <p>The converting plan stores the information in their system and uses the information to update their own production plan, now knowing</p> <ul style="list-style-type: none"> <li>• what kind reels will be available</li> <li>• when the reels for sheeting will be available</li> <li>• when the customer has requested delivery of the sheets</li> </ul>   |