"A day in the life of the S-Series"


Integrated Data Processing

Presenter Name: Horst Lützelberger
Title: Manager Material Data Management
Organization: AIRBUS DEFENCE & SPACE

ILS S-Series Spec Day
September 24, 2015
Preparation of S2000M information:

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</table>

Description:
- Bike, Mountain
- Wheels
- Brake System
- Brake, Front
- Brake Lever, LH
- Brake, Cable
Preparation of S2000M information:

**Input**
- Logistic Support Analyses
  - S3000
    - Maintenance Concept
      - Spares
      - Tooling/special Equipment
- Design Drawings Engineering + Manufacturer
- Transportation + Storage-Info.
  - Customer + Manufacturer
- Commercial Information

**Output**
- NATO-Codification (optional)
- Nato-Stock-Number
- Pre-Assessment-Meeting (optional) directly with Customer
  - Draft approval

**Usage**
- Feedback as described in
- identify Spares for Maintenance/Repair
- Material Supply (Initial Provisioning/Reprovisioning) i.a.w. S2000M
  - Chapter 3
  - Initiated by Customer

**IPD**
- Illustrated Parts Data

**IPL**
- Initial Provisioning List
  - Chapter 1

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Material Planning Process Flow

Maintenance concept (MC) → Vendor information PDM/BOM Drawings → Draft IPL → Codification results (optional) → Formal IPL (optional) → Pre-assessment meeting (optional) → Initiating of codification (optional) → IPD creation → Update

Initiation of codification (optional) → ~2x months

Draft IPL → 6 weeks

Pre-assessment meeting (optional) → ~3 months

Master IPL

Master IPL Update → IPD creation

Material Planning Process Flow

Last order date → PLT → Logistic support date

Pre-assessment meeting (optional) → Codification results (optional)

PLT - Purchasing Lead Time

PDM – Product Data Management

BOM – Bill of Material

IPL – Initial Provisioning List

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Chaptered Presentation

The Product (and certain equipment) IP presentation will be structured according to the chapterization contained in S1000D.

The MC for an equipment may dictate that the equipment should have a separate and independent IP process, publications and IPC/IPD. In these circumstances the breakdown of the equipment will appear in its own non-chapterized Separate IP (SIP) presentation.

**PLT** - Purchasing Lead Time

**PDM** – Product Data Management

**BOM** – Bill of Material

**IPL** – Initial Provisioning List
## Consideration of LSA Results for IP Data preparation

<table>
<thead>
<tr>
<th>Breakdown Element Identifier</th>
<th>Part Number</th>
<th>Item Name</th>
<th>Task Name</th>
<th>Task Interval</th>
<th>Supplies &amp; Spare parts</th>
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<td>DA1-10-20</td>
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<td>VF-10001</td>
<td>Front Wheel Brake</td>
<td>Install Brake Assy</td>
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<td>Brake Pads Cleaner liquid Lubricate oil</td>
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<tr>
<td>DA1-10-30</td>
<td>BP-2500016</td>
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Preparation of Family Tree

D00
Bike, Mountain

DA0
Wheels
  DA0-10
  Front Wheel
  DA0-20
  Rear Wheel

DA1
Brake System
  DA1-10
  Front Brake
    DA1-10-10
    Front Brake Lever
    BL-10000-13
    Brake Lever Left
    DA1-20
    Rear Brake
    DA1-10-20
    Front Brake Cable
    BC-2000015
    Brake Cable
    BC-2000013
    Front Brake Cable
    DA1-10-30
    Front Wheel Brake
      VF-10001
      V-Brake Assy
      CP-3000020
      V-Brake Mechs
      BP-2500016
      Brake Pad

DA2
Steering System
  DA2-10
  Stem

Remaining Major Parts of the Bike

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Breakdown Preparation in Disassembly Order
In addition to the engineering breakdown, the following will also be listed:

- Raw Materials
- Consumables
- Repair Kits
- Support Equipment, Tools and Test Equipment
- Shipment/Storage Parts
- Category 1 (Special-to-Type) Containers

**NOTE:** Initial Provisioning Data will be compiled for all Type of Material e.g. Mechanical, Electrical, Avionic parts etc
Material Planning Process as explained

- Submission of Price List (CPL) containing prices with commercial info (MSQ, PLT, SPQ ...)
- Quotation based on Requests for Quotation (prices with commercial info)

- Order placement based on IPL (for initial spare package - see IP-process) or based on CPL or on Quotation.
- Order Life Cycle Management (e.g. Priority, QTY, PNR, Delivery Location/Delivery Forecast Date ...).

- Issue and confirmation of electronic invoices based on logistic and commercial data
- Tax according to (inter)national tax rules
- Payment information.

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Material Management process flow:

- **INPUT**
  - LORA / LSA
  - Maintenance Concept
  - PDM/Bill of Material
  - Drawing

- **PROCESS**
  - Material Planning
    (Chapter 1 - Alternative/simplified list of spareable item in case full IP process is not necessary/not contracted in order to inform the Customer about the validity of items.)

- **OUTPUT**

- **Limited approach**

- **Spare Parts List**
  (Chapter 2)

- **Material Supply**
  (Chapter 3)
  - Pricing
    (Chapter 3-2-1)
  - Ordering
    (Chapter 3-2-2)
  - Shipment
    (Chapter 3-2-3)
  - Invoicing
    (Chapter 3-2-4)

- **IPL** (recommended spares parts) or SPL
  - Prices
  - Prices/Conditions
  - Destination
  - Transport Agent
  - Valid Order
  - Prices/Conditions
  - Delivery

- **List of recommended spare parts**

- Price Lists (CPL)
- Quotations
- Conditions
- Item order
- Order Monitoring
- Item shipped
- Invoicing/Payment
Material Management process flow:

**INPUT**
- LORA / LSA
- Maintenance Concept
- PDM/Bill of Material
- Drawing
- Limited approach

**PROCESS**
- Material Planning (Chapter 1)
- Spare Parts List (Chapter 2)
- Pricing (Chapter 3-2-1)
- Ordering (Chapter 3-2-2)
- Shipment (Chapter 3-2-3)

**OUTPUT**
- IPL (structure in disassembly order)
- IPD (according to S1000D)
- List of recommended spare parts
- Price Lists (CPL)
- Quotations
- Conditions
- Item order
- Order Monitoring
- Item shipped
- Vocabulary, list of terms used in S2000M

Material Supply (Chapter 3)

- Framing rules for e-communication using XML messages
- Proposal for Data Interchange Agreement
- Definition of all Data Elements used in S2000M (Name, TEI, formant, usage, remarks)

Communications Techniques (Chapter 4)

Data Dictionary (Chapter 5)

Definition and Abbreviations (Chapter 6)
- Material Planning Process as explained

-Alternative/simplified list of spareable item in case full IP process is not necessary/not contracted in order to inform the Customer about the validity of items.

Order placement based on IPL (for initial spare package - see IP-process) or based on CPL or on Quotation.
-Order Life Cycle Management (e.g. Priority, QTY, PNR, Delivery Location/Delivery Forecast Date ...).

Issue and confirmation of electronic invoices based on logistic and commercial data
-Tax according to (inter)national tax rules
-Payment information.

-Vocabulary, list of terms used in S2000M

-Definition of all Data Elements used in S2000M (Name, TEI, formant, usage, remarks)

-Framing rules for e-communication using XML messages
-Proposal for Data Interchange Agreement

-Submission of Price List (CPL) containing prices with commercial info (MSQ, PLT, SPQ ...)
-Quotation based on Requests for Quotation (prices with commercial info)

-Arrangement of transportation (date/time, volume, weight, addresses ...)
-Confirmation of transport
-Advice of delivery/ of good receipt

-IPL (recommended spares parts) or SPL

-Destination

-Order placement based on IPL (for initial spare package - see IP-process) or based on CPL or on Quotation.

-Definition and Abbreviations (Chapter 6)

-Data Dictionary (Chapter 5)

-Communication Techniques (Chapter 4)

-Maintenance Concept
-PDM/Bill of Material

-LORA / LSA

-Communication process flow:

• INPUT
  •LORA / LSA
  •Maintenance Concept
  •PDM/Bill of Material

• PROCESS
  •Material Planning (Chapter 1)
  •Pricing (Chapter 3-2-1)
  •Shipments (Chapter 3-2-3)

• Output
  •Quotations
  •Conditions

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More information?

Please visit: www.S2000M.org

Thank you for your attention