Study Case: Clause 7.5 – Information requirements

Clause 7: Support

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2.7.5 Clause 7.5 – Information requirements

This is a complex and demanding clause. There are six shall statements that, in effect, require an organisation to have relatively highly defined asset data and information requirement specifications to support and enable its Asset Management System, at the specific attribute level of granularity. It is closely related to the next clause and should be read in conjunction with it.

| ‘Shall’ Statement 7.5-1 – Asset & AMS Information Requirements Determination |
| ‘Shall’ Statement 7.5-2 – AM Information Requirements Development |
| ‘Shall’ Statement 7.5-3 – AM Information Attributes, Quality and Collection Processes |
| ‘Shall’ Statement 7.5-4 – Information Management Processes |
| ‘Shall’ Statement 7.5-5 – Requirements for the Alignment of Asset Financial & Non-Financial Data |
| ‘Shall’ Statement 7.5-6 – Alignment of Asset Financial & Non-Financial Data |

**Considerations for Railway Infrastructure Organisations**

- This clause requires the organisation to have a good understanding of its assets, their performance, health, costs, risks, underlying relationships between each other, and criticality to the Asset Management system. In particular, it requires that financial and non-financial data related to assets is aligned and provide sufficient clarity for decision making.

- Fit for purpose asset information is essential for developing the appropriate strategies and producing and implementing work and operational plans. The scope of asset information is defined by the requirements of the components of the UIC Asset Management Framework - Figure 4.

- For a rail infrastructure organisation, the information types required to support Asset Management decision making include but are not limited to:
  - Information on the physical asset
  - Location information
  - Asset and system relationship/hierarchy information
  - Intervention history information
  - Performance and service impact information
  - Asset health information
  - Geospatial information
  - Financial information.

**Recommended Evidence**

- Asset Information Strategy
- Demonstrable linkages between the organisation’s Asset Management Policy, strategy and objectives, and the documented Asset Information Strategy
- Relationship to SAMP/ asset class strategies that define the decision making criteria and decisions required, and hence what information is required to support these decisions
- Specification of asset information requirements, including both financial and non-financial information
- Governance processes for asset information
- Data quality standards, evidence of data quality activities such as data audits and corrective actions
- Information process documentation, for example for the flow of information between maintenance, operations and asset planning
- Presence of management information AND availability to key stakeholders requiring it
- Linkage between financial and non-financial data – that is, ability to access costs by asset at appropriate asset level
1. Asset Information Strategy

- Datawarehouse
  - KPI indicators

- GIS
  - Geographic information system

- Asset Information Strategy

- Web Applications

- Budget:
  - Controlling:
    - Maintenance plans
  - Security

- Data Warehouse (Business Object)
- BW-SEM
- IN.RETE (SAP R/3)
- Circolazione (Legacy)

- RFI Portal
  - (Services around information)
2. Demonstrable linkages between the organisation's Asset Management Policy, strategy and objectives, and the documented Asset Information Strategy

Working Centre Class
It is possible to create a map of the working centres for the maintenance on object for each specialization.

This ensures the best flexibility in case of change of organizational configuration

This is very important in the automatization of work orders creation too. So is important to correctly define/chose the right working centre, taking information from here.

The example shows a special work centre class whose characteristics are the specializations, and their values are the working centres.
2. Demonstrable linkages between the organisation's Asset Management Policy, strategy and objectives, and the documented Asset Information Strategy 2/2
3. Relationship to SAMP/asset class strategies that define the decision making criteria and decisions required, and hence what information is required to support these decisions

Asset grouped by usage line category (number of train and business)
4. Specification of asset information requirements, including both financial and non-financial information

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>Information on costs and revenue.</td>
</tr>
<tr>
<td>Non-Financial</td>
<td>Information on asset usage and condition.</td>
</tr>
</tbody>
</table>

**Image Description:**

- **Visualizzazione Manutenzione Correttiva 3393118: testata centrale**
- **Details:**
  - **Ordine:** 3393118
  - **Responsabile:** Claudio
  - **Data Iniziale:** 02/01/2008
  - **Data Finale:** 02/01/2008
  - **Sede Tecnica:** L02381-RC-RC01-SE

**Signal:**

- **Color:** Red
- **Shape:** Arrow
In the work order we also have the planned and the actual costs splitted by cost elements.

### 4. Specification of asset information requirements, including both financial and non-financial information

#### Confronto pian./eff.

<table>
<thead>
<tr>
<th>Voce di costo</th>
<th>Voce di costo (Testo)</th>
<th>Costi plan. totali</th>
<th>Costi eff. totali</th>
<th>Scostami plan./eff.</th>
<th>Sc.P/E (%)</th>
<th>Divisa</th>
</tr>
</thead>
<tbody>
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<td>608,26</td>
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<td>EUR</td>
</tr>
</tbody>
</table>
Every functional location has two status that tell us if the object is new, inactive, suppressed, normally working, out of order or if it will be activated in the future.
6. Data quality standards, evidence of data quality activities such as data audits and corrective actions 1/3

BASIC DATA:
• Code
• Status
• Short and long description
• Planning Plant
• Maintenance Plant
• Cost Centre
• Failure catalogue
• Km related to line identification

CLASS AND CHARACTERISTICS:
• Technical data
• Organizational data
• Lines
• Data collected for specific purposes and other views
Reference Models are a special category of functional location: They supply the reference structure and the right class every time there is the need to create a new object.

This ensures data reliability and internal consistency.
6. Data quality standards, evidence of data quality activities such as data audits and corrective actions
7. Information process documentation, for example for the flow of information between maintenance, operations and asset planning

Business processes management: InRete and related systems

**Inframanager**

DATA analysis advanced tool, transforming data into useful INFORMATION for planning activities:
- It identifies and proposes the right activities
- It identifies and proposes priorities
- It optimizes interventions rationalizing resources

Through algorithms processed by specialists of DMA and complying with the technical rules, considering all main technical parameters, the tool enables an EFFICIENT and EFFECTIVE maintenance.

Rules → Maintenance policy
8. Presence of management information and availability to key stakeholders requiring it
9. Linkage between financial and non-financial data – that is, ability to access costs by asset at appropriate asset level

The segmentation allows to group different asset information (technical, costs, failures, reliability…) by the desired level of hierarchy (in RFI 7 hierarchy levels)