Workshop targeted to Central and Eastern Europe

Budapest, Hungary
15 May 2014
## Agenda Thursday 15 May

### 15/05/14 – Public Workshop

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Welcome/coffee</td>
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<tr>
<td>09:30</td>
<td>Introduction</td>
<td>Björn Paulsson, UIC/Trafikverket</td>
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<tr>
<td>09:45</td>
<td>The role of LCAT in asset management</td>
<td>David Castio, Network Rail&lt;br&gt;Justin LeBlanc, SKM</td>
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<td>10:15</td>
<td>Asset degradation &amp; intervention strategies</td>
<td>Marios Chryssanthopoulos, University of Surrey</td>
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<td>10:45</td>
<td>Break</td>
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<tr>
<td>11:15</td>
<td>Methods to extend life of assets</td>
<td>Lennart Elfgran, Luleå&lt;br&gt;University of Technology</td>
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<td>12:00</td>
<td>Q&amp;A</td>
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<td>12:15</td>
<td>Lunch</td>
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<td>13:15</td>
<td>Replacement of assets</td>
<td>Britta Schewe, Deutsche Bahn</td>
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<td>13:45</td>
<td>Degradation monitoring: gaps &amp; opportunities</td>
<td>Polyvios Polyviou, TWI&lt;br&gt;Zoltán ORBÁN, University of Pecs</td>
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<td>14:30</td>
<td>Case study presentation</td>
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<td>14:30</td>
<td>Demonstration of the LCAT</td>
<td>Justin LeBlanc, SKM</td>
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<td>15:30</td>
<td>Q&amp;A</td>
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<td>15:45</td>
<td>Feedback and conclusions</td>
<td>Björn Paulsson, UIC/Trafikverket</td>
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<td>16:00</td>
<td>Break – end of workshop</td>
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<tr>
<td>16:30</td>
<td>Advisory Committee meeting</td>
<td>AC + EB members</td>
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<td>18:00</td>
<td>End of meeting</td>
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THE ROLE OF LCAT IN ASSET MANAGEMENT
• What is asset management?
• Why is asset management important?
• What is the LCAT?
• How will the LCAT help me?
• How does the LCAT work?
WHAT IS ASSET MANAGEMENT?
What is asset management?

• Asset Management is:
  « The coordinated activities of an organisation to realise value from physical assets »
  
  Definition from International Standard ISO 55000.
What is asset management?
WHY IS ASSET MANAGEMENT IMPORTANT?
Why is asset management important?

• Less funding is available for railways due to the European recession.
• Asset Management will help Infrastructure Managers to:
  – Prioritise and justify works
  – Spend efficiently
  – Coordinate access/posessions
  – Define levels of safety and service
Why is asset management important?

- Asset management will help to prove:
  - Value for money
  - Financial sustainability
Why is asset management important?

- Asset management helps define minimum condition levels and safety limits based on engineering knowledge and experience.
WHAT IS THE LCAT?
What is the LCAT?

The Life Cycle Assessment Tool (LCAT) can compare different maintenance/replacement strategies for track and infrastructure based on a life cycle evaluation.

The evaluation quantifies:

- Direct economic costs
- Availability (delay costs / user cost)
- Environmental impact costs
What is the LCAT?

- It uses Microsoft Excel as this is familiar software.
- Flexible to suit different users across Europe.
- Can be adapted to suit different working practices.
What is the LCAT?

Soil Cuttings

Track

Metal Bridges
HOW WILL THE LCAT HELP ME?
How will the LCAT help me?

Financial Savings
- If a 5% reduction in whole life cost could be achieved through better decision making by using the LCAT; for bridges alone, a benefit of 250M€ could be realised across Europe.

Gives evidence / justification to decisions as the LCAT:
- Uses degradation data gathered from across Europe.
- Clearly displays trade-off between condition and financial costs.
- Shows environmental impact of a scheme.
HOW DOES THE LCAT WORK?
How does the LCAT work?

The LCAT uses the outputs from the other MAINLINE work packages and data from Infrastructure Managers. This is essential to validate:

- Degradation rates
- Disruption costs
- Techniques for life extension and monitoring
- Methods for replacement
- Environmental impact
LCAT – Inputs

- Initial Condition
- Intervention triggers
- Intervention benefits
- Intervention costs
LCAT – Processing

- Deterioration data from WP2
- Environmental Impact data
- Cost data

Inputs

Outputs

http://www.mainline-project.eu
LCAT – Outputs

- Financial Costs
- Environmental Impact
- Operational Impact
- Condition Profile
How does the LCAT work?

The LCAT will be demonstrated this afternoon.

The next presentation on “Asset degradation and intervention strategies” begins to show how all these elements tie together....
Thank you !