Requirements Analysis

Advisory Committee
Arne Gehlhaar, ISL
• Background
• Requirements
• RISING Results
• Background
  – Goals / Challenges
  – Approach & Solutions
• Requirements
• RISING Results
• Change of the modal split in favour of IWT
  – Shift cargo volumes
  – Make use of available capacities
• Traffic optimization on the inland waterways
• Increase in quality of service in IWT
• Protection of the environment
  – Avoid accidents and offer support in cases of calamities
  – Optimize procedures for dangerous goods
Approach & Solutions

- Use of ICT for traffic and transport management in inland waterway transport
- Development and deployment of tailor-made services
- Increase of safety and efficiency
- Support instead of surveillance
- Involvement of all stakeholders in the introduction and development of RIS
- Cooperation throughout Europe in the introduction and development of RIS
• Background

• Requirements
  – General requirements
  – User requirements

• RISING Results
General Requirements

• Introduction and development of River Information Services according to user’s demand
• Availability of RIS on all European inland waterways (Rhine, Danube, etc.)
• Harmonized and standardized RIS systems for users in administration and the industry in all countries
• Availability of RIS information beyond national or EU borders
• Harmonized and standardized processes, messages & interfaces
• Seamless integration of RIS into the planning, execution and monitoring processes of commercial users
User Requirements

• Information on traffic and transport
  – Fairway information
  – Vessel information
  – Cargo handling information

• Real-time information
  – Frequent and accurate
  – Availability of forecasts

• Single point of contact
  – Reduction of complexity
  – Quality of service (service level agreement)

• Abolishment of redundant information flows
<table>
<thead>
<tr>
<th>Transport-related information</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tr>
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<td>✓</td>
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<tr>
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<td>✓</td>
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</tr>
<tr>
<td>Water Levels (Forecasts)</td>
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<td>✓</td>
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<td>✓</td>
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<tr>
<td>Lock Status</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Weather Conditions</td>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>2</td>
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</tbody>
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- **RISING**
- **River Information Services for Transport & Logistics**
- **Transport Information**
- **09/02/2010**
- **RISING Advisory Committee**
- **page 8**
### Terminal Information

<table>
<thead>
<tr>
<th>Terminal-related information</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>#</th>
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<tbody>
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<td>(un-) loading status</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Cargo information</td>
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<td></td>
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<tr>
<td>- Availability in port</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- DC Information</td>
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<tr>
<td>Berthing time</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>
• Background
• Requirements
• RISING Results
  – RISING Framework
  – RISING Services
• Freightwise messages
  – TEP: Transport Execution Plan
  – TES: Transport Execution Status
  – TOS: Transport Operation Status
  – TNS: Transportation Network Status
  – VOO: Voyage Order
  – others

• NtS: Notices to Skippers

• ERI messages
  – ERINOT: Announcement Message
  – ERIVOY: Voyage Report
  – BERMAN: Berth Message

• Others
  – Weather Information
<table>
<thead>
<tr>
<th>RIS-based services</th>
<th>Description</th>
<th>WP2</th>
<th>WP3</th>
<th>WP4</th>
<th>Specification Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETA</td>
<td>Provides an ETA calculation based on the current position of a vessel and fairway or traffic information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>&lt;tbd&gt;</td>
</tr>
<tr>
<td>Positioning</td>
<td>Provides current position data and continuous updates requested for a specific barge or unpropelled vessel</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>RSOE</td>
</tr>
<tr>
<td>Water Levels</td>
<td>Provides current water levels as well as forecasts requested for a specific location</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>VIA</td>
</tr>
<tr>
<td>Bridge Clearance</td>
<td>Provides bridge clearance based on water levels for a specific location (bridge)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>RSOE</td>
</tr>
<tr>
<td>Lock Status</td>
<td>Provides current status information requested for specific locks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>PLOVPUT</td>
</tr>
<tr>
<td>Lock Statistics</td>
<td>Provides information on the average and peak passing times for specific locks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>&lt;tbd&gt;</td>
</tr>
<tr>
<td>Terminal-based services</td>
<td>Description</td>
<td>WP2</td>
<td>WP3</td>
<td>WP4</td>
<td>Specification Leader</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>----------------------</td>
</tr>
<tr>
<td>Berthing time confirmation</td>
<td>Provides confirmed berthing times based on the requested RTA and RTD for a specific voyage and load-/unload list</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>CRUP</td>
</tr>
<tr>
<td>Cargo Operation Service</td>
<td>Provides handling confirmations about cargo which has been loaded or unloaded at a terminal</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>CRUP</td>
</tr>
<tr>
<td>Cargo Data Service</td>
<td>Provides updates of cargo information (e.g. container weight or type/size) in case of deviations</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>CRUP</td>
</tr>
<tr>
<td>Barge Operation Service</td>
<td>Provides handling confirmations about the beginning and the completion of the load and unload operations of a barge or unpropelled vessel</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>CRUP</td>
</tr>
</tbody>
</table>
Thank you for your attention

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