Corridor Management, the next step in the deployment of RIS

Cas Willems
PIANC Guidelines 2011

- Traffic planning is defined in the RIS guidelines 2011 and is an essential step towards corridor management.
- Traffic planning in a transport corridor requires an integrated network-approach.
- Traffic Planning will close the gap between traffic management and transport management.

PIANC PWG125 is revitalized and will update in 2017 the RIS guidelines related to the development of Corridor Management.
The Juncker Challenge

Juncker addressed and challenged the European transport community in his “Digital single market”:

Smooth information flows to simplify access to traffic and transport data for transport by sea, inland waterways (RIS), rail and road (ITS) leading to:

• Single reporting/reduction of administrative burden
• Improved transport services in a multimodal context
• Improved safety and enhanced damage prevention (dangerous goods)
• Improved security
Corridor management as an answer to the challenge in a “Connected Digital Single Market” (EC)

- **Optimised choice of transport services**: Shippers and freight forwarders could have more elements to choose the transport service better suited to their needs in all modes.
- **Better transport management**: Freight forwarders and transport operators could optimise transport management with the support of real-time information on delays or incidents.
- **Reduce administrative costs**: Transport players could introduce their information only once, and the data could then be made automatically available to all stakeholders that they choose.
- **Greater safety and enhanced damage prevention (dangerous goods)**: On-board systems alerting on dangerous areas. Thanks to “intelligent cargo” safety and damage prevention of dangerous goods could increase.
- **Improved security**: Through more and better data on the goods, risk assessments by authorities could improve.
Definition of RIS Enabled IWT Corridor Management

“Corridor Management is defined as information services among waterway authorities mutually and with waterway users and related logistic partners in order to optimise use of inland navigation corridors within the network of European waterways”
Three different levels of corridor management:

1. Corridor Management is a service to enable reliable route planning by supplying – dynamic and static - infrastructural information
2. Corridor Management is a service to enable reliable travelling times for voyage planning and for traffic management, by providing traffic information:
   1. taking into account the actual use of the waterway network (e.g. actual waiting times) and
   2. taking in account predictions during a voyage (e.g. predicted waiting times on the corridor) where considered reasonable
3. Corridor Management is a service to support transport management of the logistic partners (e.g. deviation management).
level 1 information services on:

- Static Infrastructure
- Dynamic Infrastructure
- Actual and Predicted Water Levels
Level 2.A information services on:
• Vessels
• Traffic
• Voyages
Voyage, cargo and voyage messages

Electronic Reporting

On-Board Applications

Traffic Planning Service

Level 2. B Level information services on:
- Traffic planning/prediction

Traffic Information

TIS

FIS

Position information

Traffic Centre

Lock/Bridge

Water Levels

AIS data exchange

CoRISMa

TEN-T RIS Enabled Corridor Management

Nautical Information

Voyage, cargo and voyage messages
Logistic Platform

AIS-data

Voyage & Cargo Data

Paperless Sailing

Electronic Reporting

Voyage, cargo and voyage messages

On-Board Applications

Traffic Information

Traffic Planning Service

Level 3: support to transport management

Traffic Information

On-Board Applications

TIS

FIS

Position information

Lock/Bridge

Traffic centre

CoRISMa

TEN-T RIS Enabled Corridor Management

AIS data exchange

Water Levels

AIS data exchange

Nautical Information
Corridor Management from data to information

Traffic and Transport management applications

Distribution

Position data

Lock/bridge Status data

Cargo/voyage data

(dangerous) cargo data

Casco data

Network data

Waiting areas res. & planning (dossier)

Lock/Bridge Planning (dossier)

Historical Nautical data
European Corridor based RIS data “warehouses” for RIS corridor management services

2020: Harmonised RIS services on IWT corridors
European corridor based multi-modal data “warehouses” for traffic and transport services

2025 : Harmonised multi-modal transport services on CEF corridors
Thank you for your attention

Questions?