PIANC RIS Guidelines 2011
Edition 3

Smart Rivers Conference 2011

PIANC RIS working group
Cas Willems
Content

• Historical context

• PIANC RIS Working group

• PIANC RIS guidelines 2011 - Edition 3

• RIS status 2010; technical report on the implementation

Status
Historical context

- European research projects of the European Commission initiated the RIS development
- 1999 PIANC Installed a RIS working Group
  - RIS Guidelines PIANC Edition 1 in 2002
  - RIS Guidelines PIANC Edition 2 in 2004
- Central Commission on Navigation on the Rhine (CCNR) UN ECE and Danube Commission formalized the RIS guidelines and RIS standards
  - Applicable to all waterways of the EU of class IV or higher
  - Binding rules for authorities on the implementation of RIS
- River Information Services are in an implementation stage in North and South America, Europe and Asia
PIANC RIS working Group 125

- Tasks:
  - Status report on the implementation and operation of River Information Services
  - Update of the PIANC RIS Guidelines 2004
  - Set up a document on RIS definitions

- RIS working group members from:
  - Austria, Belgium, China, Czech Republic, Finland, France, Germany, Hungary, Poland, Russia, Serbia, the Netherlands, USA,
  - Chairman: Cas Willems (the Netherlands)
Why updating the Guidelines?

• Edition 2 based on research
• Edition 3 based on the experiences gained and lessons learned in the RIS implementation processes since 2004.

These experiences are in Edition 3 reflected in:

• RIS key technologies developed and formalised
  – Standards included
  – Technological developments included
  – Relations to Reference data, RIS index, Hull data are included
• Relation between RIS key technologies and the RIS services are highlighted
• Traffic Planning as part of the RIS service Traffic Management is introduced
• A chapter is included providing support to implement RIS in a structured approach.
RIVER INFORMATION SERVICES 2010 TECHNICAL REPORT ON THE IMPLEMENTATION STATUS
**Implementation status**

- River Information Services = the concept for harmonised information services to support *traffic* and *transport* management in inland navigation, including interfaces to other transport modes.

- Traffic management support services:
  - Fairway Information Services
  - Traffic Information Services
  - Vessel Traffic Services
  - Lock and Bridge management
  - Calamity abatement Services

- Transport management support services are still lacking behind Wednesday, 21 September 2011
Fairway Information Services

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**News**

1. [Published Documents](#)
   - RIS Publications
   - Locks Schedule
   - Published Reports
   - Case Studies
   - Miscellaneous

2. [FAQ](#)
   - Feedback
   - Contacts
   - Useful Links
   - Documents

3. [Shared Documents](#)
   - Notices
   - Legal Notice

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**Home**

**Actualities**

- [ELDIS Charts](#)
- [Notices to Skippers](#)

**Water level**

- [Objects on the Danube](#)
- RIS regulation
- Radio Regulation
- [ADN Database](#)

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**Users**

- Hiroslav Sychtařík
- SPS Prague

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**Links**

- Danube: [http://www.nkh.hu/hajozas/content/view/3575](http://www.nkh.hu/hajozas/content/view/3575)
- Tributaries of the Danube: [http://www.nkh.hu/hajozas/content/view/3591](http://www.nkh.hu/hajozas/content/view/3591)
- Tributaries of River Tisza: [http://www.nkh.hu/hajozas/content/view/3593](http://www.nkh.hu/hajozas/content/view/3593)
- Lake Balaton: [http://www.nkh.hu/hajozas/content/view/3592](http://www.nkh.hu/hajozas/content/view/3592)
- Lake Velence: [http://www.nkh.hu/hajozas/content/view/3671](http://www.nkh.hu/hajozas/content/view/3671)
- River Drava: [http://www.nkh.hu/hajozas/content/view/3670](http://www.nkh.hu/hajozas/content/view/3670)
- Notices to Skippers: [http://www.nkh.hu/hajozas/content/view/3575](http://www.nkh.hu/hajozas/content/view/3575)
Inland ECDIS
(Strategic) Traffic Information

- Electronic reporting
  - Mandatory on Rhine for container vessels
- Inland AIS network
  - Danube River
  - Netherlands under preparation
- Traffic Information networks
  - IVS90, MIB, DORIS
  - VOS
Lock management

- **Waterways and Shipping Office Luxemburg**
- **Waterways and Shipping Office Trier**
- **Waterways and Shipping Office Koblenz**

- Mosel
- Rhine
- Saar

- Data exchange Lock/Lock
- Data exchange Lock/Office
- Data exchange Lock/VTS
- Data transmission of the ship (VHF radio, GSM)

Wednesday, 21 September 2011
RIS Key technologies

- The RIS Key Technologies have a central position in the services to be provided in the RIS arena. The Key Technologies are:
  - Inland ECDIS
  - Electronic Reporting
  - Vessel Tracking and Tracing (Inland AIS)
  - Notice to Skippers

- RIS references data, Hull data and RIS index are in addition key elements in the RIS standards and are an important link between the various RIS-services.
RIS key technologies and reference data

- **ERI**
  - Electronic Reporting
- **NtS**
  - Notices to skippers
- **RIS-Index**
  - Unique identifier of waterway objects
- **Inland ECDIS**
- **Hull-data**
  - Static vessel data
- **VTT**
  - Vessel tracking and tracing

**Referencedata**
(e.g. ENI, RIS-Index, ADN)
RIS Key technologies and RIS Services

RIS Key Technologies:
- Inland ECDIS
- Electronic Ship Reporting
- Notice to Skippers
- Vessel Tracking and Tracing Systems
- Information for Transport Logistics
- Information for law enforcement
- Statistics
- Waterway charges and port dues

RIS Services:
- Fairway Information Service
- Traffic Information Services
- Traffic Management
- Calamity Abatement Support

Reference Data
- RIS Index
Conclusions and recommendations 1

- Authorities are mainly responsible for the implementation of RIS services, users starting with the application of RIS, Industry developing new systems and applications require **stable standards**;
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• Authorities are mainly responsible for the implementation of RIS services, users starting with the application of RIS, Industry developing new systems and applications require stable standards;

• The development, implementation and operational use of RIS and the interoperability of RIS services and maritime information services will benefit from developments in the Maritime environment as there are in special the e-Navigation concept and in Europe the e-Maritime concept;
Conclusions and recommendations

- Authorities are mainly responsible for the implementation of RIS services, users starting with the application of RIS, Industry developing new systems and applications require **stable standards**;

- The development, implementation and operational use of RIS and the interoperability of RIS services and maritime information services will benefit from **developments in the Maritime environment** as there are in special the e-Navigation concept and in Europe the e-Maritime concept;

- Information exchange in an international network requires **legislative measures** to provide the data on basis of a need to know principle, but also to protect privacy and prevent misuse of commercial sensitive information.
Conclusions and recommendations 2

- Traffic management - including Lock and bridge management - in a transport corridor requires an integrated network-approach where the information services to the users are an interactive part of voyage and traffic planning processes.
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Conclusions and recommendations 2

- Traffic management - including Lock and bridge management - in a transport corridor requires an **integrated network-approach** where the information services to the users are an interactive part of voyage and traffic planning processes.

- **Traffic planning** is becoming more and more an essential and explicit part of RIS Traffic Management.

- Support to transport planning requires that the RIS authorities are willing and authorised to provide information on vessels, their positions, their voyages and cargo to third parties. There are **legal obstructions**, mainly driven by privacy regulations, on the provision of these services. This hampers the use of RIS information for logistic services and consequently it hampers the development of related transport services;
Conclusions and recommendations

- Electronic reporting supports safety and calamity abatement services and as such electronic reporting should be made mandatory in a stepwise approach;
Conclusions and recommendations

- **Electronic reporting** supports safety and calamity abatement services and as such electronic reporting should be made **mandatory** in a stepwise approach;

- In many RIS related processes the implementation and use of Inland AIS on board as well as on shore is a pre-condition. The full scale benefit of Inland AIS for RIS services requires a **carriage requirement for Inland AIS**;
Conclusions and recommendations 4

- **Electronic reporting** supports safety and calamity abatement services and as such electronic reporting should be made **mandatory** in a stepwise approach;

- In many RIS related processes the implementation and use of Inland AIS on board as well as on shore is a pre-condition. The full scale benefit of Inland AIS for RIS services requires a **carriage requirement for Inland AIS**;

- The basic reference table on location codes, the so called **RIS Index**, is the consistent and unambiguous basis for many RIS services. It is highly recommended to start a procedure to formalize the RIS index as the mandatory electronic format for geo-related objects.
Questions
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Or later
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