Implementation of River Information Services in Serbia

Directorate for Inland Waterways
Bucharest, 27-10-2011
Overview of past events

- First initiative on RIS implementation in Serbia in **2001**
- First ENCs are published in **2002/2003**
- First governmental vessels equipped with AIS and ECDIS Viewers in **2004**
- First installation of AIS basestations (Belgrade, Novi Sad) in **2005**
- RIS center and Tracking and Tracing prototype implemented in **2007**
- Detailed design and specification for full scale implementation in **2008**
- Start of full scale implementation in September **2009**
**EU Funded Implementation of RIS in Serbia**

Full scale implementation of the RIS on the Serbian Danube

- **Funding Programme:** IPA 2007
- **Project duration:** 2009-2012
- **Overall project value EUR 11 Mill, divided in 3 contracts**
  - Supplies of equipment for RIS implementation
  - Implementation of RIS on the Serbian Danube
  - Supervision of implementation
- **Funded by EU – 100%**
- **Main Beneficiaries:**
  - Ministry for Infrastructure and Energy
  - Directorate for Inland Waterways - Plovput
General outline

• Different ICT based system integrated in functional RIS system:
  – AIS based tracking and tracing
  – FIS by means of ENCs and Notices to Skippers (NtS)
  – Electronic reporting system (ERI)
  – Hull Database (Hull DB)
  – Data Exchange Gateway (NIDES)
  – dGPS correction provision (IALA/AIS)

• Equipment programme for governmental vessels
• Equipment programme for commercial vessels
General outline

• General concept/segments
  – Central segment in Belgrade (Plovput)
  – RIS Centre in Belgrade (Plovput)
  – Authority Segement
  – User Segment
  – Logistics Segment

• Geographical structure
  – Shore segment
  – Onboard segment
Tracking and Tracing

- AIS network of 15 onshore basestations, alongside the Danube
- Currently 15 out of 15 AIS basestations installed
- Functional acceptance test executed
- Performance tests to be done
- Current coverage 100% of Serbian Danube
• AIS based Tracking and Tracing system installed
• Functional acceptance test executed
• Performance tests to be done
Tracking and Tracing
### Tracking and Tracing

#### AIS Overview

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#### Ship static data

- **MMSI**: 207254114
- **Name**: MADARA
- **Position**: 20° 40.9' N, 10° 33.1' E
- **Speed**: 0.00 kph
- **Course**: 0.00°
- **Destination**: ZINGOROD
- **Speed**: 0.00 kph
- **Source**: N/A

#### Inland specific

- **Cargo**: Loaded / Unloaded
- **Unknown**: N/A
- **Regional code**: Regional
- **Number of staff**: 6
- **Passengers**: 0
- **Gross tonnage**: 52
- Web portal is available with Serbian dataset online
- D4D system integrated up to state of the art version
- Maintenance portal integrated
- Data exchange with other Danube countries ongoing
Electronic Navigational Charts

- ENC production platform updated (software + hardware)
- New production tools obtained
- Multibeam echosounder improved
- Hi-res satellite imaged of the Danube obtained
• Implemented according to NtS 2.1 standard
• Currently waterlevel related messages are automatically published
### Hull DB – Implemented

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#### National number
- Europe: NA
- Other: NA
- Other: NA

#### Dimensions
- Length: 65.8 m
- Width: NA
- Draught: 3.18 m
- Depth of Hold: 2.45 m
- Height: NA

#### Construction
- Hull construction: NA
- Type: Type 1: NA
- Type: Type 2: NA
- Type: Type 3: NA
- Type: Type 4: NA

#### Equipment
- ATIS Code: NA
- MMSI Code: NA
- MMSI (AIS): NA

#### Operator
- Name: NA
- Address: NA
- City: NA
- Telephone-1: NA
- Telephone-2: NA
- Telephone-3: NA
- Email-1: NA
- Email-2: NA
- Email-3: NA
Who is using RIS today in Serbia?

Authorities and public sector

- Directorate for Inland Waterways PLOVP UT
- Lock operators at Iron Gate 1 and Iron Gate 2
- Serbian Customs
- Ministry of agriculture, forestry and water management
- Ministry of Interior – Border Police
- Ministry of Interior - Gendarmerie
- Ministry of Interior – Sector for Emergency Situations (Fire brigade)
- Ministry of Infrastructure and Energetic – Captaincies
Who is using RIS today in Serbia?

Commercial Sector

- Port of Belgrade, passenger quay
- Danube Group (shipping operator)
- Ladjar Transport (shipping operator, for T&T, fleet management)
- Skippers directly involved in navigation on the Serbian Danube
Transponder equipment programme

- Commercial vessels
- Launched in mid July 2011
- Equipment available AIS transponders, ECDIS systems (information mode – laptop plus Periskal Viewer)
- So far approx 40 commercial vessels applied
Serbian Customs – Bezdan-Mohacs
Iron Gate 2 Lock
Captaincy
Authority vessel - Customs
Authority vessel – Border Police
Authority vessel – Gendarmerie
Authority vessel – Gendarmerie
Thank You
for Your Kind Attention

Directorate for Inland Waterways
Bucharest, 27-10-2011