Inland Waterways in SERBIA
-Latest Activities-

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- RIS in Serbia
- Zezelj Bridge in Novi Sad
River Training Works on the Danube River in Serbia
Basic project data

- EU funding programme: IPA 2010
- EU funding rate: 100%
- Value: EUR 2.1 Mill
- Timeframe: 2011-2013
- Beneficiaries:
  - Ministry of Transport
  - Directorate for Inland Waterways

- Goal: Ensure sustainable minimum depth and width for low water periods

- Measure: the best combination of structural and non-structural options
**Critical sectors**

- Master Plan (2006)
  - 18 critical sectors
  - 40 km total length

- IPA 2010 project (2011)
  - 24 critical sectors
  - 70 km total length
Range of the Project

- hydraulic models (1D and 2D)
- Feasibility study and conceptual designs for all critical sectors
- CBA
- EIA
- main designs and tender documentation for works and supervision and monitoring on 6 critical sectors
- Documentation is being prepared in accordance to national legislation, as well as EU legislation
Strategic and legal framework

**Strategic framework:**
- General transport master plan (2009)
- Spatial plan of the corridor VII (drafted)
- EU strategy for the Danube region (2010)

**Inland navigation:**
- DC Recommendations
- AGN (UNECE)
- SRB-CRO bilateral agreement on inland navigation and fairway maintenance (2009)
- Law on navigation and ports on inland waterways (2010)
- Bylaws

**Water management:**
- Law on waters
- Relevant bylaws
- WFD (EU)
- Danube Protection Convention
- Danube River Basin management plan (ICPDR)

**Environment:**
- ESPOO convention
- Law on nature protection
- Law on environment protection
- Law on EIA
- Law on SEA
- Regulation on ecological network
- Specific spatial plans
- Relevant bylaws

**Protection of cultural monuments**
- Law on cultural heritage
- Bylaws

**Law on construction and spatial planning**
Basic orientation

Ensuring **minimum depth and width** of the fairway during the low water periods, while respecting environmental requirements

- Preserving **connectivity** conditions
- Preferring **detached structures**
- Ensuring **mitigation measures**
- Preserving **sediment equilibrium**
Next steps

- Transition to the main design and **tender documentation** phase of the project
- Integrated planning process for critical sectors on the SRB-CRO joint stretch of the Danube River
Next steps

Time perspective 2014-2016

- works on 6 critical sectors for which main designs and tender documentation are being prepared
- Supervision of works and environmental monitoring
Dissemination
Stakeholders’ Forum

- **Interdisciplinary** approach
  - inland waterway transport
  - hydrotechnics
  - industry
  - nature and environment protection
  - archaeology

- **Kick-off**: 26th of June 2012
- **Ensuring** **transparency**
- **Using** **multi-criteria analysis**
- **Methodology** of the work ensuring comparability of options
Stakeholder’s Forum - Basic principles of work

- Membership is voluntary
- Membership is free of charge
- Recommendations of the Forum have advisory character
- Mutual respect and acknowledgment of standpoints of others

Acknowledging each others
Basic principles of the work

- All documents are in both **Serbian and English**
- Work of the Forum is public and **transparent**
- **Observers** are welcomed

Respecting each others
Represented fields of interests

- **Interdisciplinary** approach:
  - inland waterway transport
  - hydrotechnics
  - industry
  - nature and environment protection
  - archaeology

Building trust
Forum members

Asking each others
• **General rules** on organization and work of the Forum

• **Annex I** to the General rules – list of members and deputy members

• Active participation of observers

• **Methodology** of the work ensuring comparability of options and choosing the best

**Learning from each others**
Results

- Results of **evaluation** of the work of the Forum
- **6 critical sectors** presented and discussed
- Detailed discussion and fruitful inputs

**Common understanding**
Results

- Identification and **common agreement on the preferred options** for further modeling for 6 critical sectors on Serbian stretch of the Danube
- **2,500 hits** on Plovput website – section Forum
- All documents available in **Serbian and English**
- Short **movie** about the Forum

Planning together
For more info on Project

www.plovput.rs
RIS in Serbia
Basic project data

- EU funding programme: IPA 2007
- EU funding rate: 100%
- Value: EUR 10.5 Mill
- Timeframe: 2009-2013
- Beneficiaries:
  - Ministry of Transport
  - Directorate for Inland Waterways
Vessel Tracking and Tracing
Onshore Control Terminals

- 50 user terminals in different governmental organizations
  - Border police
  - River police
  - Gendarmerie
  - Customs
  - Captaincies...
Lock Management System
Lock Management System
Position Correction Systems - IALA Beacons

Girdle Ness

2D position plots [m]

Girdle Ness
PS correction data

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[Diagram showing PS correction data]
Position Correction Systems

Position accuracy better than 0.5m
Onboard Navigation System
Onboard Navigation System

- 49 governmental vessels
- 160 commercial vessels
Bylaw on RIS

- Published in Official Gazette in July 2013.

- RIS application obligatory in the Republic of Serbia as of 01.01.2014.
Obligatory Use of RIS Services

• Mandatory Services
  – 01.01.2014. AIS – Automatic Identification System
  – 01.01.2014. NtS – Electronic Notices to Skippers
  – 01.01.2015. ERI – Electronic Reporting
  – 01.01.2015. ENC – Electronic Navigational Charts
Zezelj Bridge in Novi Sad
Basic project data

- EU funding programme: IPA 2009
- Value:
  - IPA Programme EUR ~30Mill
  - Serbian Ministry of Infrastructure EUR ~30 Million
- Timeframe: 2009-2013
- FIDIC Rules (Yellow Book)
- User: Serbian Railways
Basic project data

- Original Zezelj Bridge constructed in 1961, and was main road and railroad connection
- Destroyed in 1999, during bombing
- Temporary bridge, which is not in compliance with Danube Commission Recommendations was built in May 2000 and presents obstacle for navigation
Main Bridge Info

General arrangement of the structure / Opsta dispozicija konstrukcije mosta

Bridge structure 1-2-3
Konstrukcija mosta 1-2-3

Bridge structure 3-4-5
Konstrukcija mosta 3-4-5
Summary

River Training Works on the Danube River in Serbia

RIS in Serbia

Zezelj Bridge in Novi Sad
Thank you for your kind attention

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Directorate for Inland Waterways