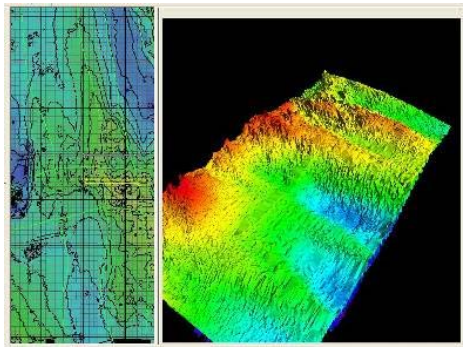
Republic of Serbia
Directorate for Inland Waterways

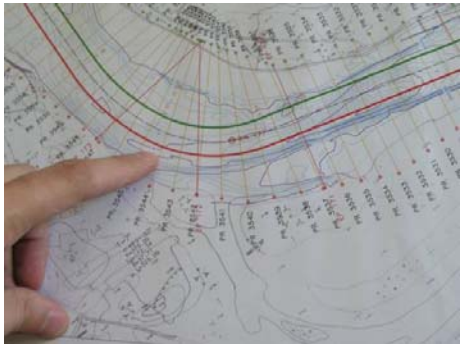
The waterway management company's view
Where are we standing?

Danube Business Talks 2018
Focus Session on Waterway Infrastructure and Improvement of Navigation Conditions

Directorate for Inland Waterways - Plovput



Hydrographic Survey



Waterway Design

River Training Works

Waterway Marking

River Information Services

- **Established in 1963**
- **Managing 963 km of International IWWs (Danube, Sava, and Tisa Rivers)**
- **Integral part of MCTI since 1. Jan 2013**
- **Our mission is to provide efficiant, sustainable, standardized and environmentally friendly system of inland waterways which will be used by general public and economy at local and international scale**

Representing Serbia Internationally

INTERNATIONAL SAVA RIVER BASIN COMMISSION

E waterways in Serbia

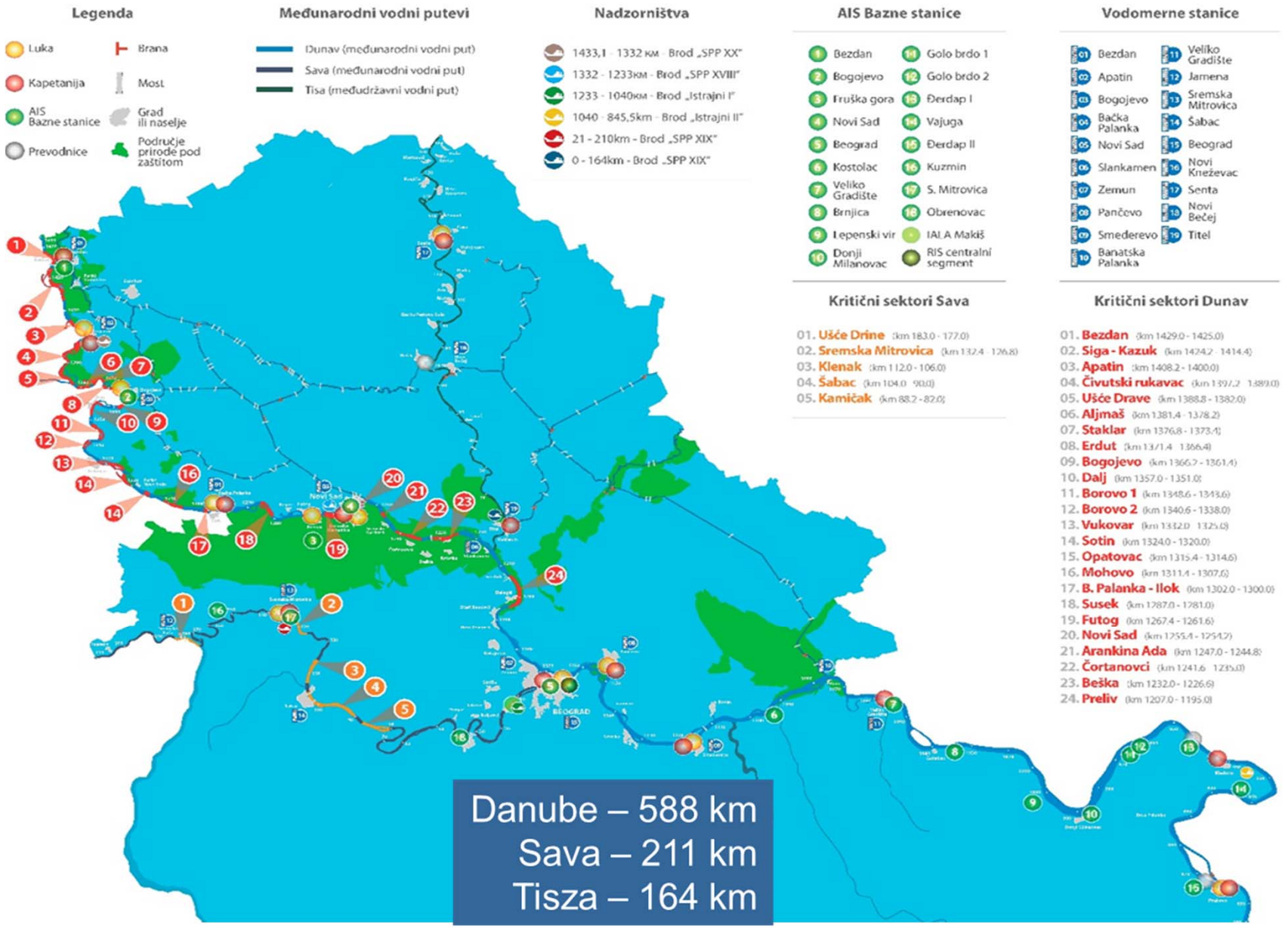
The Danube offers an East-West axis, from the Black to North Sea

Rivers Sava and Tisa as an international addition to the axis the Rhine – Danube

Hydro system the Danube-Tisa-Danube as a local network of inland waterways in Vojvodina region connecting other countries

Positive economic effects are expected from the existing reliable modern inland waterways: investing in attractive industrial locations in the vicinity of navigable waterways, investing in transport sector and supporting facilities, stabilizing of transport services prices, etc.

Current state of navigability



Strategic Framework

- **Master Plan for IWW Transport in Serbia (2006)**
- **Law on Navigation and Ports on Inland Waterways**
- **Strategy on waterborne transport development of the Republic of Serbia, 2015 - 2025**
- **EU Strategy for the Danube Region (2010)**
- **The Specific Purpose Spatial Plan for the Danube Corridor**

Master Plan and Feasibility Study
Inland Waterway Transports for Serbia

River Information Services - RIS

- **Source of finance: EU IPA 2007**
- **Implementation period: 2009-2013**
- **Project value: 10.5 million Euros**
- **Scope of the project: Danube and Sava rivers**

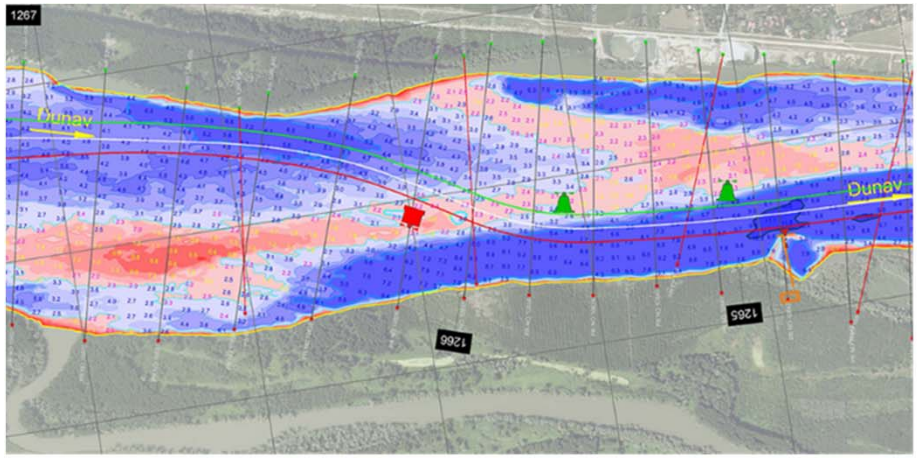
The overall objective of the programme for RIS implementation was to improve the safety and efficiency of inland waterway navigation.

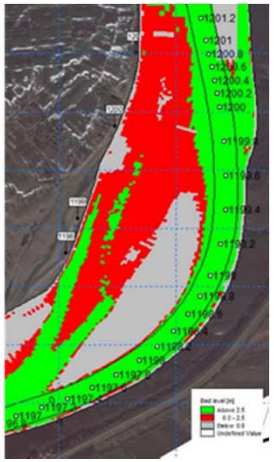
Thanks to this project, the Republic of Serbia benefits from the latest tools developed in the field of Inland Navigation, providing to its different authorities new possibilities for the traffic management on the rivers.

River training and dredging works on critical sectors on the Danube river

The Project is funded by the European Union

Project status: Contract was signed in June 2017,
Contracted value: 7,613,555 €,
Project goal: Improvement of navigation conditions during the low water periods,
Project description: Execution of river training works at 6 critical sectors along the Serbian stretch of the Danube river (Susek, Futog, Arankina Ada, Cortanovci, Beska, Preliv) consisting of: dredging and the construction of 1 detached groyne, 3 bottom sills and 3 chevrons within a construction period of 3 years.





River training and dredging works on critical sectors on the Danube river

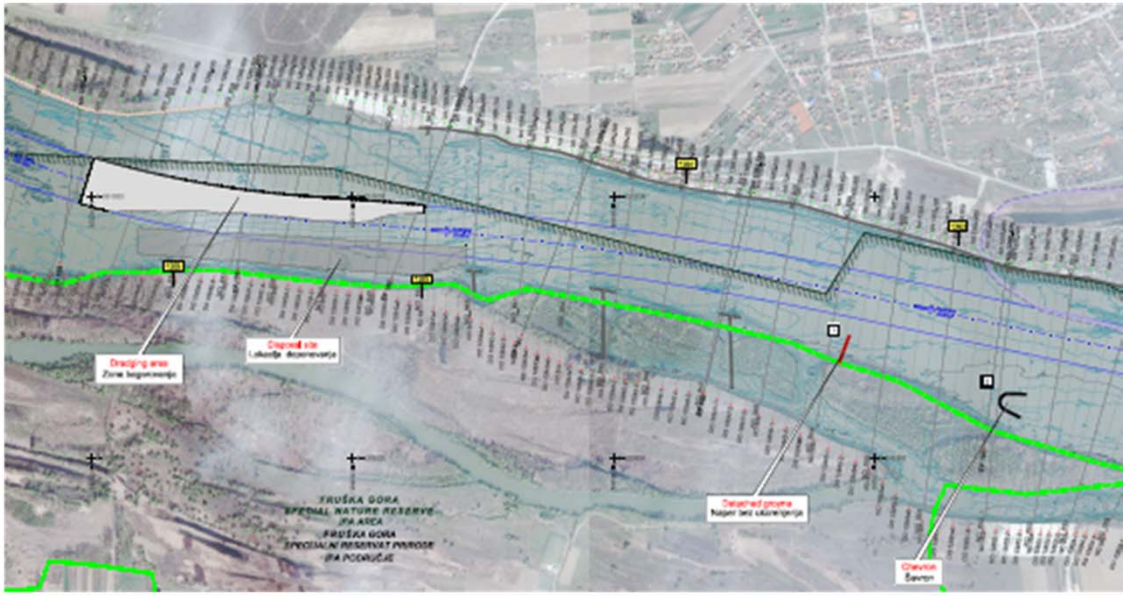
The Project is funded by the European Union

Aplication of JS Guiding Principles:

✓All designed structures are detached, enabling free flow, not narrowing the river bed,

✓No long-term impact on water levels, flood water levels are not exacerbated,

✓Implementing all required environmental protection measures and other legal provisions related to the environment, in line with the approved EIA study,



✓Environmental monitoring ensured: before, during and after works: hydro morphology, water and sediment quality, biology.

Rehabilitation of the Iron Gate I navigational lock

Republic of Serbia
Ministry of Construction, Transport and Infrastructure

Co-financed by the European Union
Connecting Europe Facility

Rehabilitation of the Iron Gate I navigational lock

Republic of Serbia
Ministry of Construction, Transport and Infrastructure

Co-financed by the European Union
Connecting Europe Facility

For 47 years, no significant maintenance works on machinery and other equipment were conducted, thus putting the functioning of navigational lock "Iron Gate I" at risk. That could potentially lead to catastrophic effects on Danube river navigation, industry and economy of the region...

Danube navigation monitoring and reaction system

AtoNs Danube Serbia

The Project is funded by the European Union

Contracted value: 2.561.873 € (all 3 contracts),

Contracts: Contracts signed in June 2016

- Technical assistance and supervision for installation of equipment and integration of navigation monitoring system on the Danube river,
- Supply and installation of equipment for navigation monitoring system on the Danube River,
- Integration of navigation monitoring system on the Danube River.

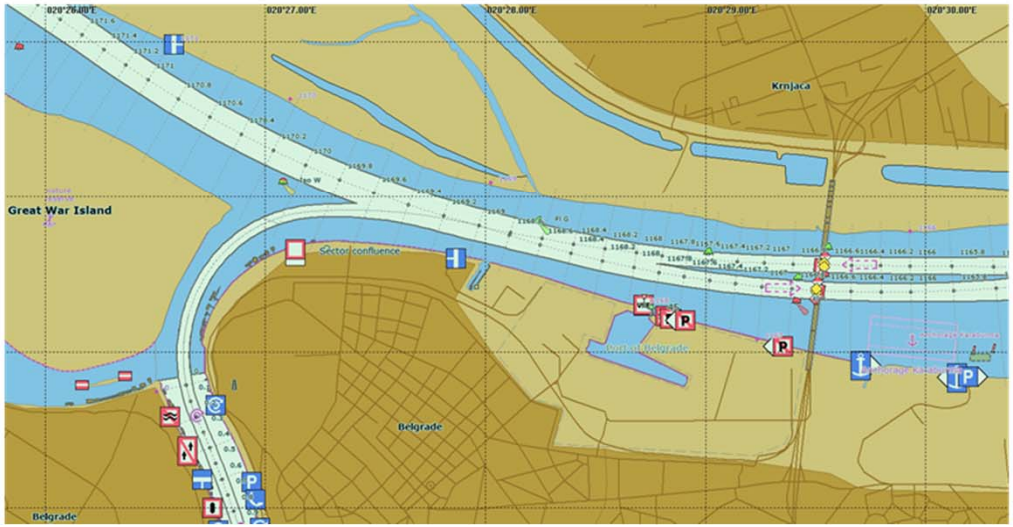
Project goal: Contribute to the increase of capacity and safety of environmentally sound and sustainable inland waterway transport on the Danube River,

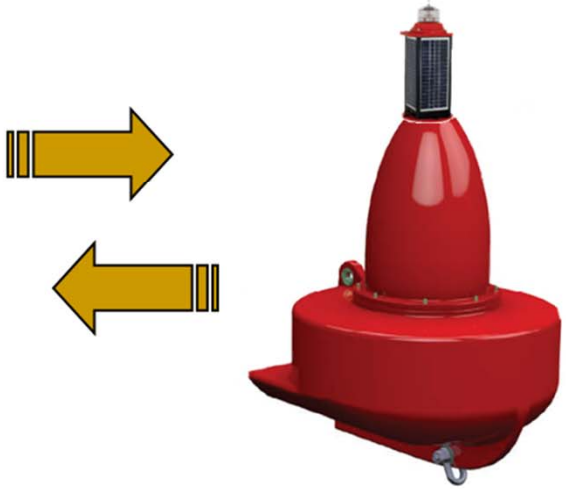
Danube navigation monitoring and reaction system

AtoNs Danube Serbia

The Project is funded by the European Union

Project description: Installation of AIS transponders on buoys and development of custom software tools will create an interactive network of real and virtual AToNs integrated into existing RIS system, dynamically providing real time data about fairway marking system, thus adding value to existing fairway information services throughout Serbian stretch of Danube River. This system will also allow river administration to constantly monitor status of every buoy and react accordingly in order to increase navigation safety.



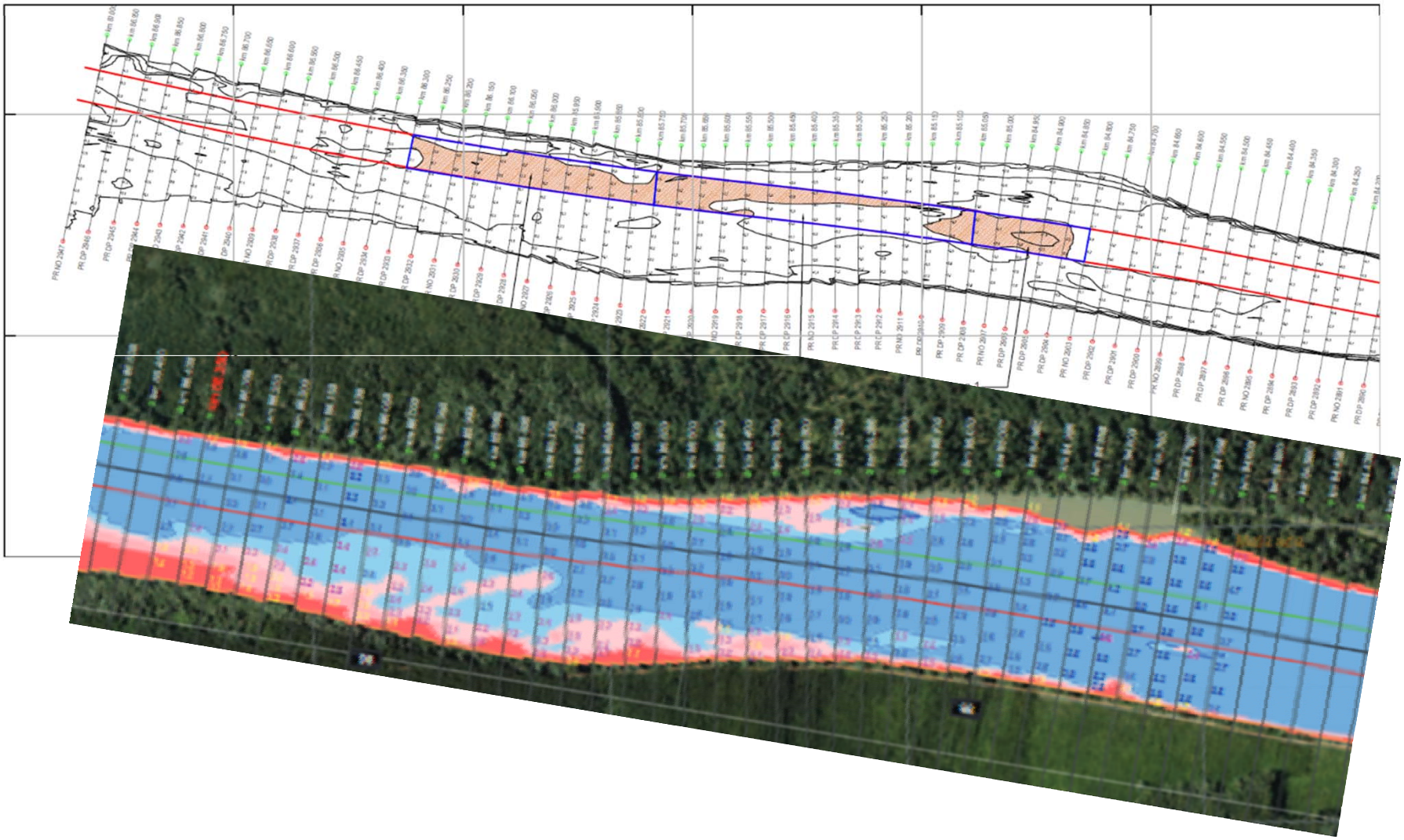


Dredging works on critical sector “Kamicak” from rkm 87 – rkm 83 of the Sava River

Project description:

- **Section of the Sava River Waterway Class IV,**
- **Dredging works started in July 2017 and ended in October 2017, before low water period,**
- **There are 3 priority stretches,**
- **Dredging parameters (EN): Bmax=75m, Hmax=2.8m, total volume: 25.000 m^3,**
- **Sediment equilibrium is preserved by placing back all dredged material into the river,**
- **Dredging works are executed by MCTI-Directorate for Inland Waterways (Plovput), and are 100% state financed.**

Dredging works on critical sector “Kamicak” from rkm 87 – rkm 83 of the Sava River



Other ongoing Projects

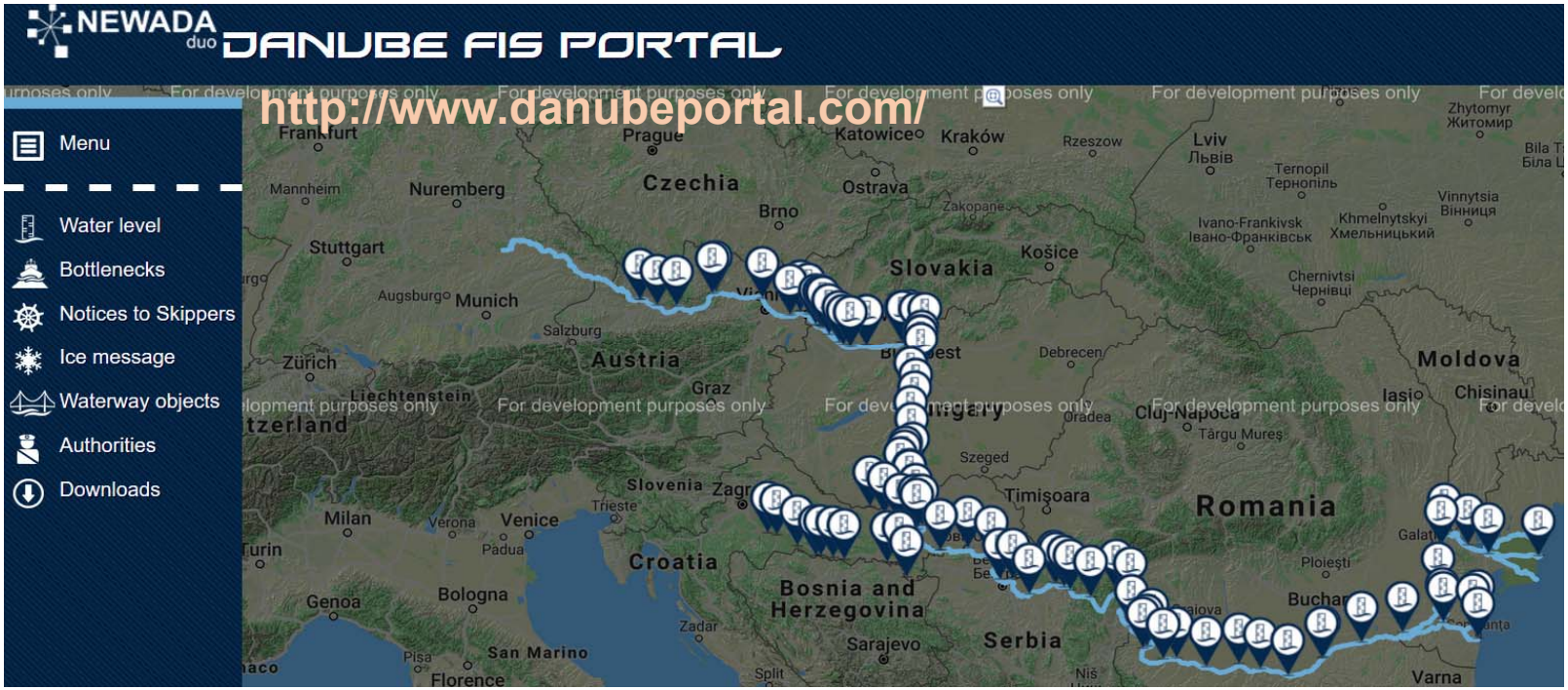
- **Danube Stream (Smart, Integrated and Harmonized Waterway Management)** - establishing and maintaining an efficient and environmentally friendly transportation network of the Danube and its navigable tributaries, by further developing effective waterway infrastructure management.
  Harmonization of information quality about navigation and navigational conditions, coordinated management of waterways through waterway management tools and cooperation in the field of waterway measures implementation respecting the principle of environmental protection, as well as strategic cooperation,

Interreg
Danube Transnational Programme
Danube STREAM

- **Danube Sediment** - improving water and sediment management as well as the morphology of the Danube River trough an basin-wide transnational approach. A main project result will be "Danube Sediment Management Guidance" document that will deliver key contributions to the 3rd Danube River Basin Management Plan and the 2nd Danube Flood Risk Management Plan, both developed by the ICPDR.

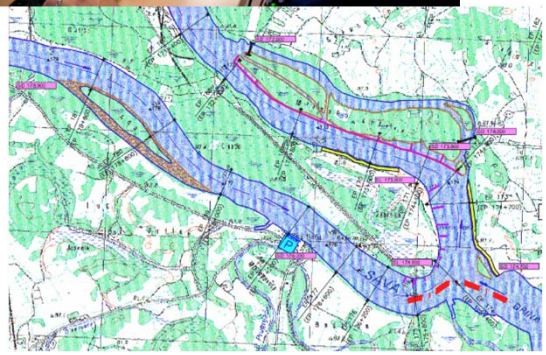
Interreg
Danube Transnational Programme
DanubeSediment

Advantages of digitalisation for the Inland Waterway Sector



Future Projects

- **WWII sunken fleet extraction (Prahovo)** – Improving local navigation conditions (rkm 862 – rkm 857) and safety by extracting 23 sunken German war ships with UXOs onboard, downstream from Iron Gate II navigation lock.
- **Implementation of hydro-meteo and bridge clearance system** - Currently insufficient number of gauging and meteo stations for navigation purposes. The aim of providing the realtime data to skippers.
- **Implementation of VTS and voice VHF system in Serbia** - Contribution to safety and efficiency of waterway transport by ability to communicate with competent authority 24/7 and ability of competent authority to monitor and manage traffic.
- **River training and dredging works on the Sava River (The Drina Confluence)** - Navigation bottleneck to be removed. Contributing to the continuity and reliability of navigation conditions of the Sava River waterway.



WHERE ARE WE STANDING?

HAVE WE GONE AS FAR AS WE COULD?

HAVE WE REACHED OUR LIMITS?

WHAT CAN WE LEARN FROM OTHER TRANSPORT SECTORS?

Thank you for your attention!

Ljubiša Mihajlović, Managing Director

Directorate for Inland Waterways
Francuska 9, Belgrade
E-mail: ljmihajlovic@plovput.rs
website: www.plovput.gov.rs

Republic of Serbia
Directorate for Inland Waterways