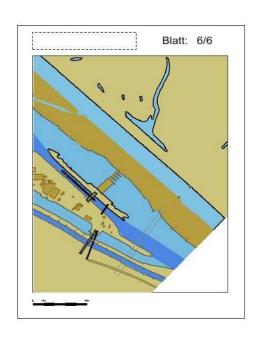


## **Sava Commission Activities**





**DANUBE SKILLS KICK OFF EVENT, February 21, 2017, Bucharest** 



## **Establishment of the ISRBC**



## Decay of SFRY – a challenge to WRM in the Sava river basin

- Sava river used to be the biggest **national river** of former SFRY
- Activities related to WRM in the SRB were regulated by national regulation, plans and programs
- Appropriate institutional framework for implementation of water policy in the SRB existed until decay of SFRY
- Upon establishment of independent countries in the basin, Sava River was turned into international river
- New, international framework required for exploitation, protection and control of the Sava river, i.e. for the TWRM



## From different priorities to Integrated TWRM approach

- Rehabilitation and development of navigation
- Flood protection
- Utilization of potentials for tourism development
- Utilization of potentials for energy production
- Maintenance of water quality and quantity



## FRAMEWORK AGREEMENT ON THE SAVA RIVER BASIN



- The first development-oriented multilateral agreement in the region signed after the Dayton Peace Agreement (1995)
- Parties:
  - Bosnia & Herzegovina
  - Croatia
  - Serbia (formerly FR Yugoslavia, Serbia & Montenegro)
  - Slovenia

(**Montenegro** – ongoing contacts on their possible approach)

 Implementation coordinated by the ISRBC, with the Secretariat as its executive and administrative body



## Key objective:

## Transboundary cooperation for sustainable development of the region

- Particular objectives to establish:
  - International regime of navigation
  - Sustainable water management
  - Sustainable management of hazards (floods, droughts, accidents, etc.)
- Provides the ISRBC with the broadest scope of work among European basin organizations (i.e. river/lake commissions)



- General info (cont.)
  - Given the international legal capacity, for:
    - Making decisions in the field of Navigation
    - Providing recommendations in all other fields,
       i.e. Water Protection and Hazard Management
  - Decisions and recommendations are adopted by unanimous vote
    - On sessions
    - In written procedure (in urgent cases)



### Coordination of:

- Development of joint / integrated plans for the SRB
  - River Basin Management Plan (according to EU WFD)
  - Flood Risk Management Plan (according to EU Flood Directive)
- Establishment of integrated systems for the SRB
  - GIS (according to EU INSPIRE Directive and WISE)
  - RIS (according to EU RIS Directive)
  - Meteorological and Hydrological Data Exchange System
  - Flood Forecasting and Warning System
  - Accident Emergency Warning System (use of the ICDPR's system)
- Preparation of **development programs** for the SRB
  - Navigation
  - (River) Tourism
  - Other water uses



## Coordination of (cont.):

- Harmonization of regulations
- Creation of additional protocols to the FASRB
  - Navigation regime
  - Prevention of water pollution caused by navigation
  - Flood protection
  - Emergency situations
  - Sediment management
  - Transboundary impacts

## Cooperation / stakeholder involvement / public participation

(Performed according to the **Strategy**, **Action Plan** and **Work Plans**)

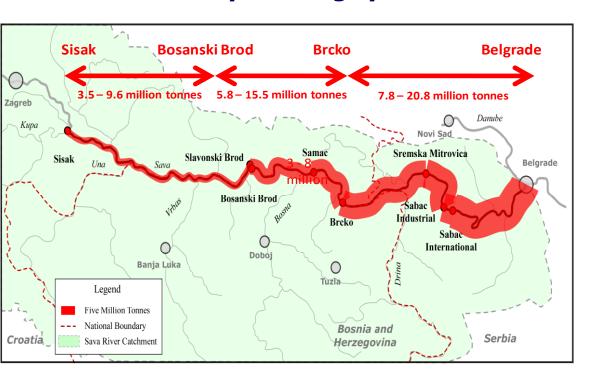


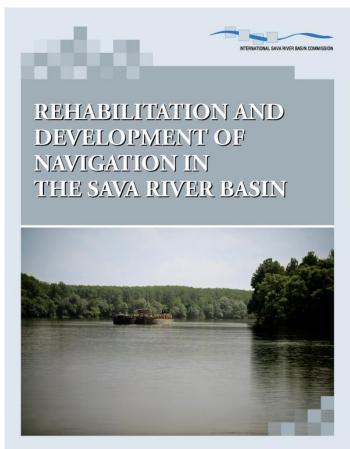
## **Navigation development**



## Rehabilitation of the waterway infrastructure

- Planning phase under finalization (studies, design)
- Waterway marking system restoration



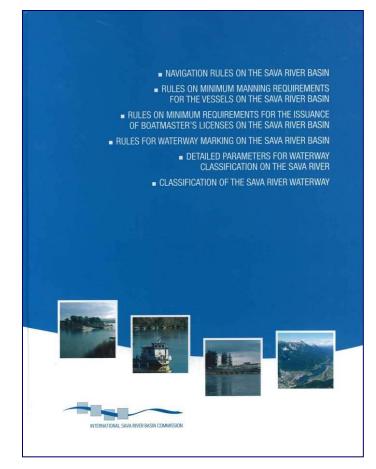




Improvement of navigation safety and technical standards

(reduction of the risk of water pollution due to navigation)

- Rules harmonized with the EU and UNECE regulation
- Protocol on Prevention of Water
   Pollution caused by Navigation
   to the FASRB
- Development of RIS





## **RIS PROJECT**



- In September, 2009 ISRBC launched a <u>project</u> called "Detailed Design and Prototype Installation for the RIS on the Sava River"
- Final Report adopted 24.06.2010.
- Final Report presented and delivered to the Sava countries for the implementation.



## Follow up to the RIS Project

## **Implementation:**

- -Finished in Serbia
- -Finished in Croatia



## Web Application for the Waterway Marking

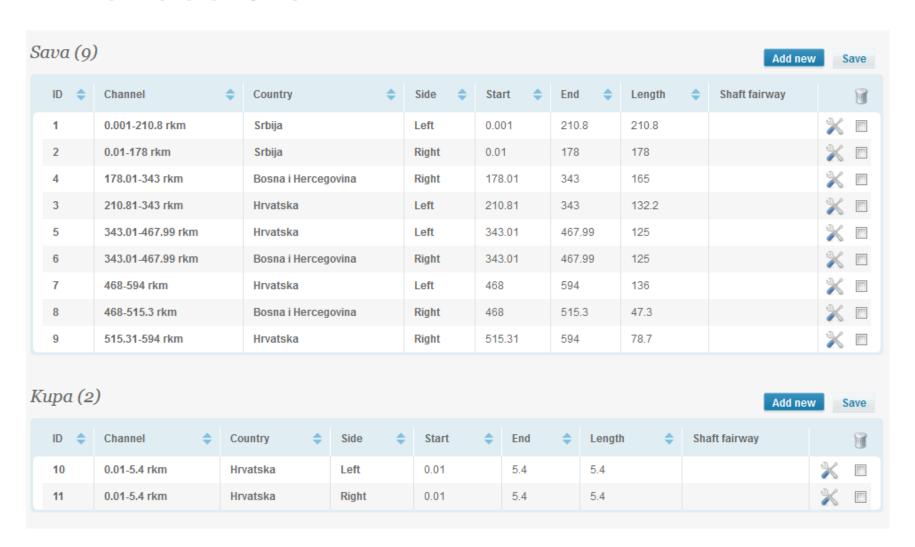


## **Current marking plan**

RIGHT BANK	Distance rkm	LEFT BANK	RIGHT BANK	Distance rkm	LEFT BAN
ŀ	594.0			583.3	
k	<b>593.0</b>		I	<b>(m</b> 583.0	
	592.0 km		km	582.0	
(	591.1			582.0	
k	<b>M</b> 591.0		_	581.6	
	590.0 km			581.4	
	589.0 km			581.1	
I	588.0			581.0	
	587.8	•		580.7	
k	m <sub>587.0</sub>			<sub>580.0</sub> km	



## **River sectors**





## **Summary of marks (for the whole WW)**

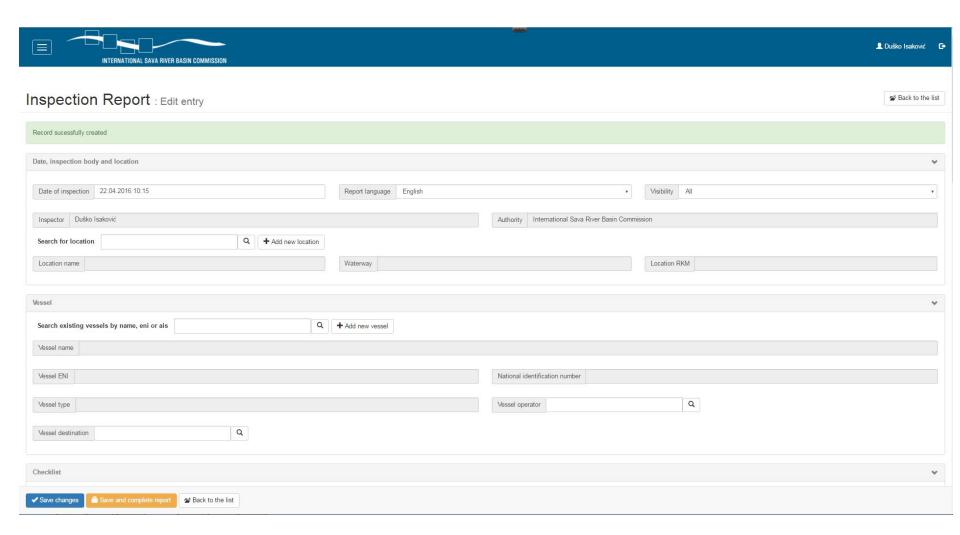
Sava rkm 594.0 - rkm 0.0	
Type of sign	Sum
igns for waterway marking (Prohibitory, mandatory, restrictive, recommendatory, informative signs)	
Buoyage of Fairway limits in the waterway (buoys with light, buoys without light, floats and spars)	
Marks on land indicating the position of the Fairway (with light and without light)	86
Signs for marking danger points and obstacles (on the water, banks, with lights and without lights)	9
Additional marking for navigation by radar (radar reflectors on the bridge piers)	0
Signs on the water for marking broad waterways and lakes	0
Extraordinary signs (kilometer signs)	600
Σ	1051



## Web Application for Navigation Safety Inspection

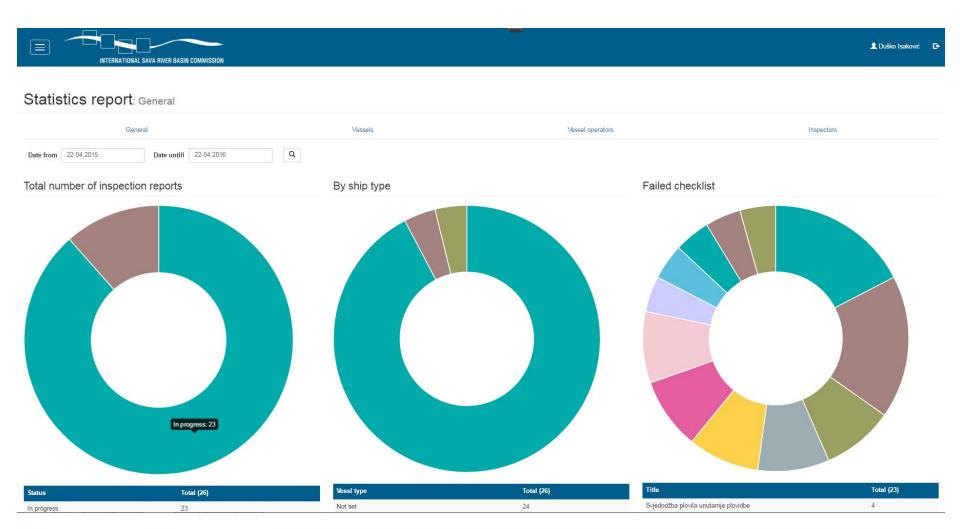


## **Inspection Report**





## **Statistics Report**





# Geographical & Hydrological Information System of the Sava River Basin Sava GIS & Sava HIS

## Sava Geographical Information System



### Overall objectives

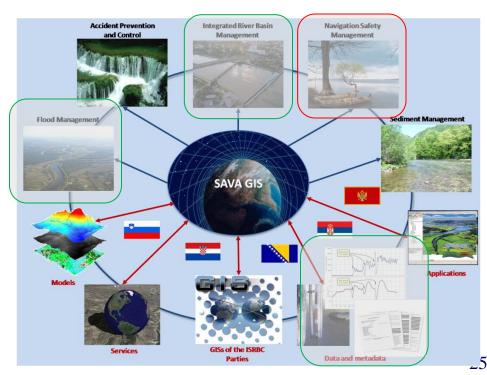
- common platform of the ISRBC community to enable sharing and disseminating of information and knowledge about protection of the water resources and water management activities in the Sava River Basin
- support to the ISRBC community in sharing and disseminating of hydrologic and meteorological data, information and knowledge about the water resources in the Sava River basin
- enable an effective common channel for exchanging and viewing the hydrologic and meteorological data and information in emergency situations, primarily those related to flood events

According to *Implementing Documents for Establishment of the Sava GIS* – 2010, establishment of the Sava GIS is focused in following benefit areas: *Modules* 

- 1. Int. River Basin Management
- 2. Flood Management
- 3. Accident Prevention and Control
- 4. Navigation Safety Management
- 5. Sediment Management

## Submodules

Time-Series Data Management Metadata Management





## New Pilot System Launched by ISRBC and Kentron Technologies SRL



- Fairway Information Services,
- WEB mapping,
- GIS information on the Sava River and region



## **ENCs**

