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ANNUAL REPORT
on work and activities of the
International Sava River Basin Commission
for the period April 1, 2018 – March 31, 2019

July 2019

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Introduction

General tasks and competencies of International Sava River Basin Commission (*ISRBC*, *Sava Commission*) are stipulated by Framework Agreement on the Sava River Basin (*FASRB*) and, more specifically, by Annex I to FASRB – Statute of the International Sava River Basin Commission. One of the obligations of ISRBC, according to the Statute, is to submit annual reports on its work to the Parties of FASRB (Bosnia and Herzegovina, Republic of Croatia, Republic of Serbia and Republic of Slovenia). This Annual Report on the work and activities of ISRBC for the period April 1, 2018 – March 31, 2019 (*Annual Report*) has been prepared accordingly.

The *Annual Report* corresponds to the Financial Year 2018 (FY 2018). All the work programs and plans mentioned throughout the report also correspond to the financial year stated.

Significant efforts were invested during the reporting period to make further progress in the FASRB implementation. In *water management*, significant progress has been made towards the development of the second Sava River Basin Management Plan (*Sava RBMP*); the first Flood Risk Management Plan for the Sava River Basin (*Sava FRMP*) has been finalized on the technical level; the fully operational version of a joint Flood Forecasting and Warning System for the Sava River basin (*Sava FFWS*) was released in October 2018. In *navigation*, ISRBC was focused on the activities towards rehabilitation and development of the navigation and transport on the Sava River waterway, and on the continuation of the work on standards related to navigation safety and other technical standards, in line with the latest EU advances in the field. Regarding data and information exchange, both geographic and hydrological information systems (*Sava GIS* and *Sava HIS*) were significantly improved. More attention is invested in issues of sustainable development. After preparation of so called Joint Plan of Actions for the Sava River Basin (*JPA SRB*), a programmatic document which outlines the path towards further development of the region, ISRBC has actively participated in a follow-up activity - preparation of the Sava-Drina River Corridor Integrated Development Program, led by the World Bank, by providing necessary information and through meetings and dialogue with the bank's representatives. ISRBC also invested a lot of time in implementation of the FASRB-related projects as well as in preparation of project proposals aimed to support its further activities.

Major event that marked FY 2018 was the 7th meeting of the Parties, held in Bled (SI) on June 07, 2018.



Figure 1. Seventh Meeting of the Parties –Bled, June 07, 2018

High representatives of the Parties accepted the “*Report on implementation of the Framework Agreement on the Sava River Basin and work of the International Sava River Basin Commission for the period from April 1, 2016 to March 31, 2018*” and adopted Declaration of the 7th meeting of the Parties. They acknowledged all the work and significant results achieved in the reporting period and confirmed priority actions in the future implementation of FASRB. The Parties also appreciated a significant contribution of international organizations and institutions provided in the realization of the projects of importance for the FASRB implementation and called upon these organizations and institutions to support the implementation of the priority projects and activities of ISRBC in the future.

A detailed elaboration of the activities and results has been provided in Sections 1-7 of this report. The annexes to the Report, provided for completeness of information, contain the lists of the ISRBC members and deputy members (Annex I), List of the national institutions responsible for implementation of the FASRB (Annex II), List of the events organized/co-organized by ISRBC in FY 2018 (Annex III), the FASRB-related projects, implemented and ongoing in FY 2018 (Annex IV), the FASRB-related project proposals prepared in FY 2018 (Annex V), and a brief overview of the activities within the Sava Day 2018 celebration (Annexes VI). The list of acronyms and abbreviations is attached as Annex VII to this Report.

1. Integrated water management

In the reporting period, ISRBC was focused on continuation of activities related to the second cycle of RBM planning in the Sava River basin, flood risk management, and further development of related integrated systems. As the most measurable results, the establishment of the Sava FFWS and the drafting of the Sava FRMP could be highlighted.

Furthermore, significant efforts were invested *inter alia* in the activities dealing with sediment issues, further enhancement of hydrologic and hydraulic models, as well as in the preparation of various projects and project proposals aiming to support achieving the targets in the priority areas of cooperation, agreed by the Parties.

1.1. River basin management

Development of Sava RBMP is required by Article 12 of the FASRB and represents the most important task in reaching one of the ultimate goals of FASRB – the establishment of sustainable water management in the Sava River Basin. Following the approval of the first Plan at the 5th Meeting of the Parties (Zagreb, December 2, 2014), activities of the second RBM planning cycle started in 2015 and continued thereafter. Based on the second Sava River Basin Analysis Report (2nd SRBA) and Interim Overview of the Significant Water Management Issues in the basin (SWMI), adopted by the Sava Commission in 2017, an outline of the 2nd Sava RBMP has been developed in FY 2018. The Outline, in its nature a living document, has been prepared with special attention paid to the weaknesses and gaps identified during the development of the first plan.

Further steps towards the development of the 2nd Sava RBMP is conducted at the expert level, through work in the ISRBC expert groups. The Parties to the FASRB reconfirmed their commitment to ensuring adequate human and financial resources for preparation of the 2nd Sava RBMP at the 7th meeting of the Parties (June 7, 2018). However, it is estimated that external financial support is necessary for the development of the full-fledged Sava RBMP, with optimal results. The EEA and Norway Grants Fund for Regional Cooperation has been identified as an opportunity for gaining such support. In that regard the project concept note titled “*Development of technical basis for international river basin management planning in the Sava river basin: An innovative filling of gaps in transboundary water management*” has been developed and submitted to the abovementioned fund in June 2018. The main aim of the project is the preparation of the 2nd Sava RBMP, which should fill the major gaps of the first plan using innovative and state-of-the-art methodologies in transboundary water management and should also benefit from knowledge-sharing and the exchange of good practice in river basin management in Europe and, in particular, in the Danube River Basin. The project proposal has passed the first stage selection as one of the 40 proposals out of more than 700 submitted. Next step is the preparation of the full project proposal by the end of June 2019 for the second and final stage of assessment.

Protocol on Sediment Management which entered into force in October 2017 stipulates the exchange of data on planned dredging on yearly basis. For that purpose, the template for provision of information on planned dredging has been developed and adopted by the Sava Commission in January 2019. The template was distributed to the Parties in March 2019 and the following relevant information from national authorities is expected by spring/summer 2019:

- Location and type of dredging
- Information on the contractor who implements dredging
- Assessment of sediment quality and quantity and grain size distribution
- Disposal and treatment of sediment

Taking into account that agriculture is closely connected with water resources management the *Regional workshop on challenges and needs of the water and agricultural sectors in the Sava region* was organized in cooperation with the ICPDR on February 20 -21, 2019. The main aim of the workshop was to obtain more detailed insight from a Sava region on the challenges, needs, interests, expectations and constraints of these sectors and to have an understanding what policy tools and measures are in place, planned to be introduced or still missing in the Sava countries, which can help achieving sustainable agriculture in the region. The recommendations from the workshop will contribute to further development of the guidance document as a strategic framework providing consistent approaches into which the Danube countries may and will be encouraged to integrate their individual national methods.

1.2. Flood management

Drafting of Sava FRMP and finalizing of Sava FFWS can be highlighted as the main results of the cooperation of the Parties in flood management in FY 2018. The long-lasting collective effort was backed up through technical assistance provided by the Western Balkan Investment Framework (*WBIF*) through the project Improvement of joint Flood Management Actions in the Sava River Basin, administered by the World Bank, and successfully finalized by the end of 2018.

The final draft of the joint Sava FRMP has been prepared in line with the Protocol on Flood Protection to the FASRB and in accordance with the EU Floods Directive (2007/60/EC). The joint Sava FRMP set up common objectives of flood risk management on the basin wide scale, and ensured a consistent and coordinated approach in management of flood risks in the basin.

Article 6 of the Protocol on Flood Protection to the FASRB establishes the obligation to identify areas of mutual interest for flood protection at the Sava basin level (AMIs). Accordingly, 21 AMIs have been identified, as basic units for analyzing the flood risks in the Sava FRMP. AMIs were identified based on 251 potential flood areas important for flood protection in the Sava River basin: 129 in Croatia, 46 in B&H, 64 in Slovenia, 7 in Serbia and 5 in Montenegro. Total surface of AMIs is 5,659 km², which is 5.8% of the total Sava River basin surface, and a home to 1.4 million people.

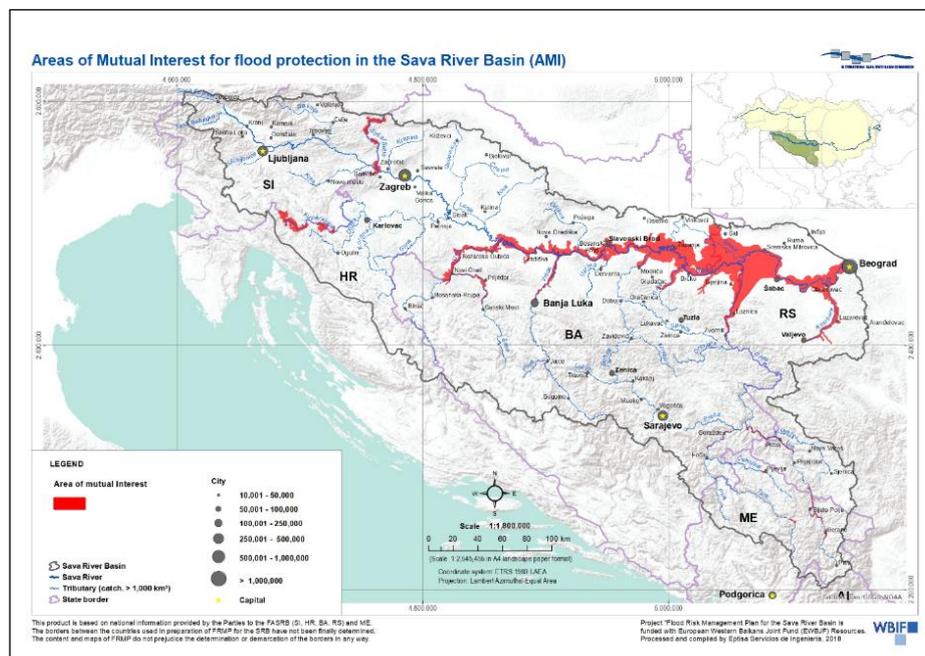


Figure 2. Areas of Mutual Interest for flood protection in the Sava River Basin – draft Sava FRMP

Common understanding of the objectives of flood risk management of mutual interest in the Sava River basin, and the identification of mutual benefits for the Sava River countries represented the basis for compilation of measures that may not, by their magnitude or impact, significantly increase the flood risk on the territory of the other country, unless those measures are coordinated and agreed between the countries concerned.

38 structural measures in AMIs with a total value of over 250 million € were identified in Sava FRMP. They were provided on the basis of national flood risk management plans in Croatia and Slovenia, as well as planning and strategic documents in Bosnia and Herzegovina, Serbia and Montenegro. The national measures presented in Sava FRMP contribute to reducing the chance of duplication of works for the purpose of reducing the risk and mitigating the consequences of flooding at the Sava River Basin level.

42 non-structural measures were identified. They mostly relate to entire AMIs or the Sava River basin as a whole. Special importance during the identification of non-structural measures was given to data collection, preparation of studies and other activities aimed at improving the planning basis for the next planning cycle. The plan also discusses the relationship of the proposed measures with the Sava RBMP and provides a preliminary estimate of structural measures by different parameters. Climate change and its possible impacts on flood risks was also briefly elaborated in the plan.

Coordination mechanisms at the Sava River Basin level and cooperation in case of extraordinary flood defense were also analyzed, with recommendations for improvements.

ISRBC will deliver Sava FRMP as its official proposal to the Parties and Montenegro in English and all official languages. The final approval of Sava FRMP is expected on the 8th Meeting of the Parties, scheduled for October 24, 2019 in Sarajevo.

Another important recent result of the co-operation of the countries is the establishment of Sava FFWS. The activity, formally launched in June 2016, and successfully completed by handover of the fully operating version of the system on October 25, 2018. Sava FFWS is based on the Delft-FEWS platform, which has been applied in a number of basins around the world. The platform is flexible and allows integration of all meteorological, hydrological and hydraulic models used in the basin through the appropriate adapters. The system itself is complex, since it is designed in the form of a single central system server and three backups, located in four countries, along with a part of the system (archive and web server) located in the headquarters of the Sava Commission. However, such a system architecture enables active co-operation of all national institutions and at the same time ensures a sense of ownership. The following table lists the beneficiary institutions and the role of each institutions in the system, agreed for the first phase of its operational use.

Table 1. List of Sava FFWS beneficiary institutions

State	Institution	Note
Slovenia	ARSO, Ljubljana	Central server
Croatia	DHMZ, Zagreb	3 rd backup
	Hrvatske vode, Zagreb	
Bosna and Hercegovina	FHMZ, Sarajevo	
	RHMZ RS, Banja Luka	
	AVP Sava, Sarajevo	2 nd backup
	JU Vode Srpske, Bijeljina	
Serbia	RHMZ, Beograd	1 st backup and test system
Montenegro	ZHMS, Podgorica	
	ISRBC	Archive and web server

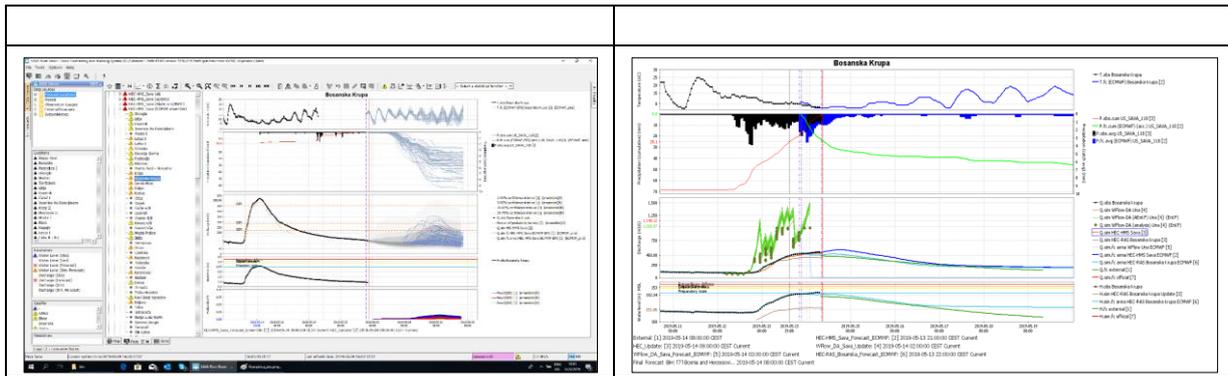


Figure 3. Sava FFWS in operational use

Sava FFWS will surely contribute strongly to the strengthening of organizations responsible for hydrometeorological services and flood defense in the countries. The system is also an added value to existing national systems and it is expected that a common forecasting platform with well-educated staff will provide a better level of preparedness and optimized mitigation measures, thereby significantly contributing to reducing consequences of flooding. Bearing in mind that Article 9 of the Protocol on Flood Protection requires of the Parties to ensure regular maintenance of the system after its establishment, a Memorandum of Understanding, which will precisely define the rights and obligations of all users in the operational phase of system use, is currently being finalized.

A long-term support of the U.S. Government has been continued and finalized in FY 2018 with major results made regarding the hydrological-hydraulic modelling. After delivery of the final hydrological model for the entire Sava River Basin and separate models for the major tributaries to the institutions of the Sava countries in January 2017, the hydraulic model for the Sava River and its major tributaries, using the new model elements/structures and a LiDAR-based geometry, has been successfully finalized. An advanced training workshop on hydraulic modelling for participants from national institutions was conducted in May 2018.

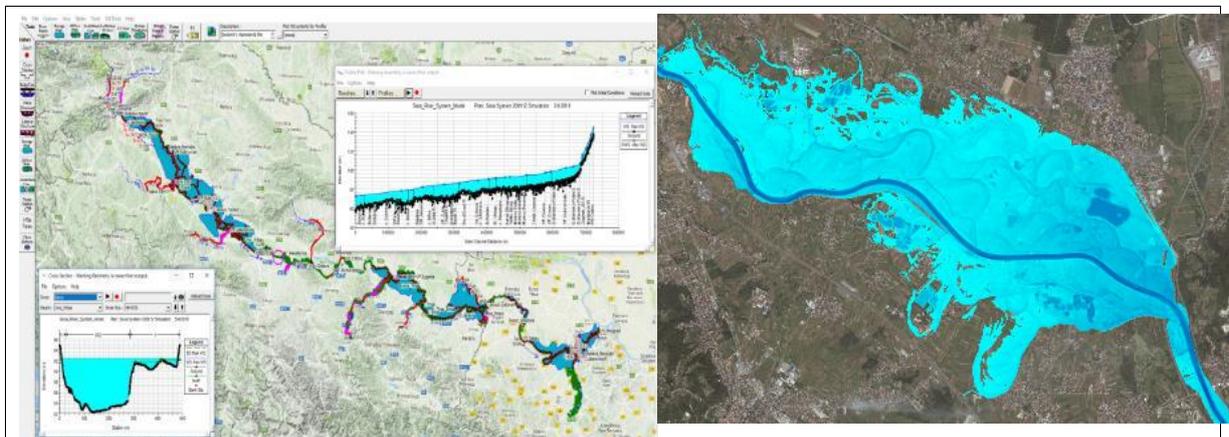


Figure 4. Sava HEC-RAS hydraulic model

Both models are incorporated in Sava FFWS. In FY 2018, a further upgrade of the hydrological model began. This is especially important because the activity is carried out entirely by national experts, with the coordination of the Secretariat of the Sava Commission.

A ceremony to mark the completion of the 2nd phase of the U.S. Government support to ISRBC and the member countries has been organized jointly with the U.S. Embassy in Zagreb and hosted by the U.S. Ambassador to Croatia. Ceremony was attended by high officials of the Sava countries, representatives of the participating U.S. institutions, as well as by the U.S. ambassadors or their representatives to Bosnia and Herzegovina, Serbia and Slovenia.



Figure 5. Photo from the ceremony on the occasion of the completion of the U.S. Government support

1.3. Accident prevention and control

The Parties to the FASRB use the Accident Emergency Warning System (AEWS), developed and maintained by the ICPDR. The objectives of the AEWS are receiving, processing and transmission of information of pollution and prompt dealing with and communication of information on emergencies. The AEWS has been tested regularly twice a year. The tests confirmed that all Principal International Alert Centers (*PIACs*) were able to perform the major tasks, although *PIACs* in Bosnia and Herzegovina and Serbia are still not part of the national systems which operate 24/7.

In FY 2018 an accident was detected on the Spreča River on 28 April 2018, when the toxic substances leaked from the so-called „White Sea“ sediment basin near Lukavac (B&H). A good cooperation has been established between related *PIACs* from Bosnia and Herzegovina and Croatia. No transboundary impact was recorded.

For the purpose of implementation of the three protocols in force: Protocol on Emergency Situations, Prevention of Pollution Caused by Navigation and Flood Protection, the improved operational response in emergency situations, including closer interaction and cooperation between river basin management authorities and civil protection sector, have been identified as a necessity. For that purpose, the project entitled *Water Contingency Management in the Sava River Basin-WACOM* was prepared and submitted to the 3rd call of the DTP which was open from 28 January to 8 March 2019. The decision about financial support is expected until the end of 2019.

2. Navigation

The ISRBC's work in the field of navigation in FY 2018 was focused on continuation of the activities towards rehabilitation and development of the navigation and transport on the Sava River waterway. At the same time, the work on the standards related to navigation safety and other technical standards has continued, in line with the latest EU legal acts, with special attention to the work of CESNI in the field of the professional qualifications of the navigation personnel.

2.1. Navigation safety and related technical standards

Improvement of the navigation safety through unification of rules in the field of navigation and development of the navigation manuals is one of the important continuous activities of ISRBC.

ISRBC has continued its cooperation with UNECE, as well as with other river commissions on further harmonization of Navigation Rules. The harmonization expert group (CEVNI EG) held its first meeting in 2019 on the premises of CCNR and it was a significant step further in the full harmonization of Navigation Rules in Europe. The discussion on the Automatic Identification Systems (AIS) implementation, prevention of the water pollution caused by shipping, navigation lights and LNG bunkering, was especially important. A discussion on autonomous shipping also started in the framework of the UNECE and regulatory framework for the autonomous shipping was marked as one of the significant issues to be discussed in future.

ISRBC has continued its participation in the work of the European committee for drawing up standards in the field of inland navigation (CESNI). CESNI objectives are to contribute to the adoption of uniform standards on the entire network of inland waterways in Europe with a view to increasing navigation safety and environment protection in the context of inland navigation transport, promoting employment in inland navigation and rendering the sector more attractive, while facilitating transport operations and promoting international trade. At its Meeting held in November 2018, CESNI adopted standards for education for operational and management level, standards for medical fitness, standards for practical exams and standards for navigation simulators. The work on standards for certificate models continued and all proposals from the ISRBC were adopted so far. At its 21st meeting PEG NAV discussed the work of CESNI and adopted some joint proposals to be presented to the CESNI.

At the same time PEG NAV continued work on the draft Decision on the Rules for the Sava Navigation Personnel with the aim of modernizing and presenting requirements for the crew qualifications and minimum manning for vessels in a single document.

In the framework of the follow-up of implementation of the Decision 16/17 on the introduction of the System for support to national bodies responsible for the navigation safety inspection, ISRBC maintained regular contacts with the users of the system aiming to improve its functionalities and to support users. Since the official start of operation on February 1, 2018 up to March 31, 2019, 86 inspections were registered in the system. ISRBC started with some basic statistical analysis of the data in the system.



Figure 6. Web application for support to national bodies responsible for the navigation safety inspection-statistics

Taking into account the necessity to regulate some issues regarding the safety of the recreational navigation on the common sectors of the Kupa between HR and SI, and following the conclusions of ISRBC, the ISRBC Secretariat in co-operation with the competent ministries drafted a proposal for a Decision *on the Rules on Navigation Regime on the Common Sectors on the Kupa River between the Republic of Croatia and the Republic of Slovenia* and presented it at the meeting which was attended by representatives of local authorities from areas along the Kupa River, representatives of the competent ministries and the Chamber of Commerce from SI and HR. The Secretariat continued the work on the Decision based on the conclusions from the meeting.

With the aim of improving and actualizing Navigation Manuals, ISRBC developed the new version of the *Indicator of River Kilometers* for sector up to Krško and started with the development of the second updated version of the *Manual on the Sava River Navigation* (mooring terms, vertical clearance under bridges and navigation lights).

Using the legal capacity given by FASRB, ISRBC adopted the following decisions related to navigation safety in FY 2018:

- Decision 11/18 *on adoption of Standard for Notices to Skippers for Inland Navigation in the Sava River Basin*
- Decision 12/18 *on Manual for the Radiotelephone Service in the Sava River Basin*
- Decision 13/18 *on Amendments to the Decision 15/14 on adoption of the Rules for Waterway marking in the Sava River Basin*
- Decision 2/19 *on adoption of the Amendments of the Decision 12/12 on adoption of the methodology of work of the Committee for monitoring and coordination of implementation of the project "Rehabilitation and development of transport and navigation on the Sava River waterway"*

ISRBC also adopted Recommendation 1/19 *on use of harmonized border control forms for the vessels in the Sava River basin* with a view to simplification, harmonization and digitalization of administrative processes in inland navigation in the Sava River Basin,

ISRBC also passed the decision on adoption of the *Waterway Marking and Maintenance Plan on the Sava River and its Navigable Tributaries for 2019 (Marking Plan)*. Marking Plan was prepared on the basis of a harmonized methodology and blue print for the marking and maintenance plan, adopted by ISRBC and used for the first time for development of the plan for 2018. ISRBC also continued with maintenance of the functionality of web application for preparation of Marking Plan.

In order to facilitate their implementation, new rules are systematically presented to representatives of the competent authorities of the Parties. At the same time, in order to improve the content of the documents based on inputs of direct users, ISRBC follows the implementation of all decisions in the Parties.

The rules, set by ISRBC, have been incorporated into internal laws in HR and RS while B&H and SI apply it directly in practice.

2.2. Rehabilitation and development of the Sava River waterway

Bearing in mind the new agreed approach to the rehabilitation and development of the navigation on the Sava River waterway, which presumes to begin firstly with the rehabilitation of the most critical sectors of the waterway, the Parties and ISRBC undertook numerous activities in FY 2018, including:

- Dredging works on the Kamičak sector (RS) were completed during 2018. According to the control survey performed one year after the completion of the works, it was concluded that the works had a positive effect and that there was no change in the fairway dimensions in cross sections over a one-year period. On the whole sector, the lowest depth over the full fairway width of the 75m is 2.5m at the low navigable level;
- Dredging works on the Šabac sector (RS) were carried out in the second half of 2018 and 70% of the planned work was completed, while the rest of the works will be done in 2019, depending on weather conditions. The planned work will also be supplemented with additional dredging to the extent that will be established based on the hydrographic surveys in March 2019;
- Serbia also secured financing for development of the project documentation for the fairway rehabilitation on the Drina Confluence sector and the start of the activities is planned for 2019;
- In B&H preliminary talks were held with representatives of international financial institutions (*IFIs*) and the EU regarding the financing of the demining of the right bank of the Sava River and the rehabilitation of the waterway. Information on priority projects in the field of IWT in B&H was provided to representatives of IFIs, and their feedback is expected;
- In order to review the current status of the activities, as well as to discuss the next steps, ISRBC organized the 7th Meeting of the Committee for Monitoring and Coordination of Implementation of the Project Rehabilitation and Development of Transport and Navigation on the Sava River Waterway (Committee) on February 28, 2019;
- ISRBC adopted Decision 2/19 by which the Committee may perform the function of a stakeholders' forum (*SF*) for specific parts of the Project if appropriate, with the aim of stimulating the implementation of the principles of the Joint Statement on Guiding Principles on the Development of Inland Navigation and Environmental Protection in the Danube River Basin (*Joint Statement*) regarding the optimal involvement of the key stakeholders;
- In accordance with the Decision 2/19 and conclusions from the 7th Meeting of the Committee, ISRBC Secretariat in cooperation with the Croatian Ministry of the Sea, Transport and Infrastructure and B&H Ministry of Communications and Transport started with activities to establish SF for the project Development of the Environmental Impact Assessment Study (EIAS) and design for the action: *Improvement of the*

Navigability Conditions of the Sava River from rkm. 300 to rkm. 329. The kick off meeting of the project was held on February 4, 2019.

ISRBC organized the meeting with the competent authorities from B&H and HR with the aim of further upgrade of the fairway marking system and harmonization of the methodology for fairway inspection (depth measurement, positioning of the floating signs...) at the B&H sector. After the meeting, joint survey of the marking system at the B&H sector was organized and further improvement of the system was agreed.

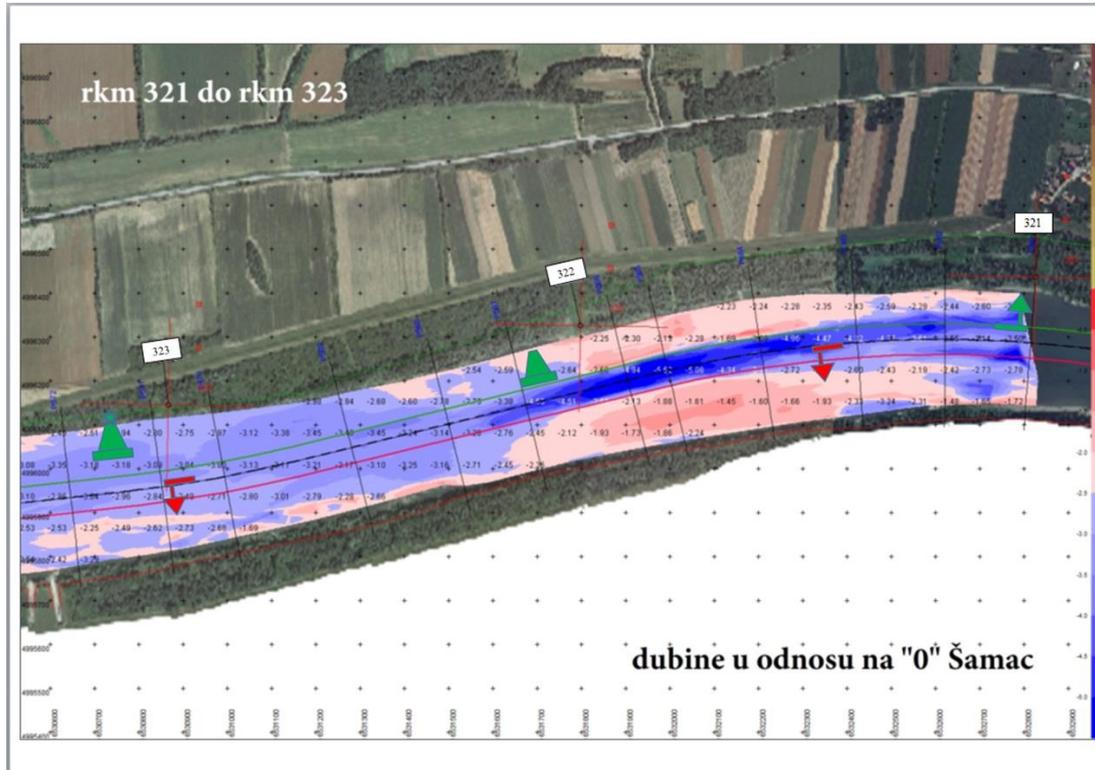


Figure 7. Proposal for the new positions of the floating signs at the sector Jaruge-Novi Grad

In order to facilitate the further implementation of the *Joint Statement*, ISRBC participated in the work of the Steering Committee for the Mixed Environment Transport External Expert Team on Integrated Planning of Inland Waterways Transport Projects (METEET) and in the organization of the second training mission, which was held in June 2018 in Serbia.

ISRBC also continued participation in the work of the Steering Committee for the Priority Area 1a of the EU Danube Strategy, with the aim to support development of navigation and promote the transport possibilities on the Sava River as a part of the European Core Transport Network.

3. Data and information management

Major advances in data and information management were achieved in FY 2018. Within development of Sava FRMP, design of the GIS database compliant with the Floods Directive Reporting Guidance 2018 has been prepared and successfully implemented within the central Sava GIS database and the Sava GIS Geoportal. Further progress has been made in hydrometeorological data exchange through Sava HIS and special advances in information exchange have been achieved through the full functionality of Sava FFWS.

3.1. Geo-information issues

Sava Geoportal, along with the related Sava GIS database and the connecting web-applications, has been fully operational since 2015. The maintenance of IT equipment, as well as the preventive and corrective maintenance of the system have been covered in different ways over the more than past 3 years, but the regular maintenance of system is still not fully organized. Spatial and attribute data in the Sava GIS are maintained using an automatized data backup procedure. The backup is scheduled to run every 4 months, while the additional backup is created manually after every data delivery cycles (e.g. within the river basin and flood risk management planning).

As mentioned above, the new Sava GIS FRM database (compliant with the Floods Directive Reporting Guidance 2018) has been successfully implemented within the Sava GIS central database. Also, all other data related to FRM were migrated and populated within the new database.

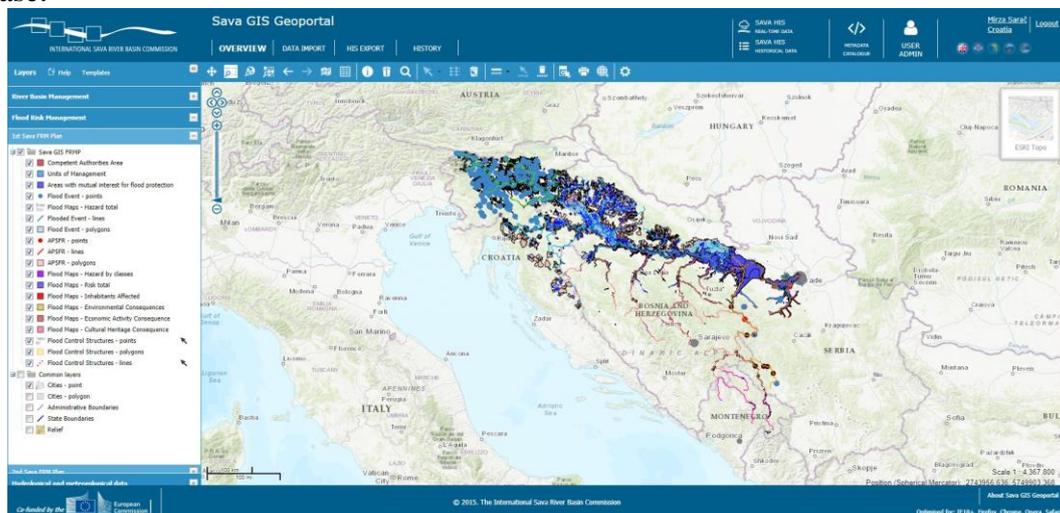


Figure 8. Sava GIS Geoportal (www.savagis.org)

Also, available metadata records (from Danube GIS) related to the existing datasets of the 2nd Sava River Basin Analysis were imported in the Sava GIS Metadata Catalogue. Data gathering cycle for the purpose of the 2nd Sava RBM Plan development is ongoing.

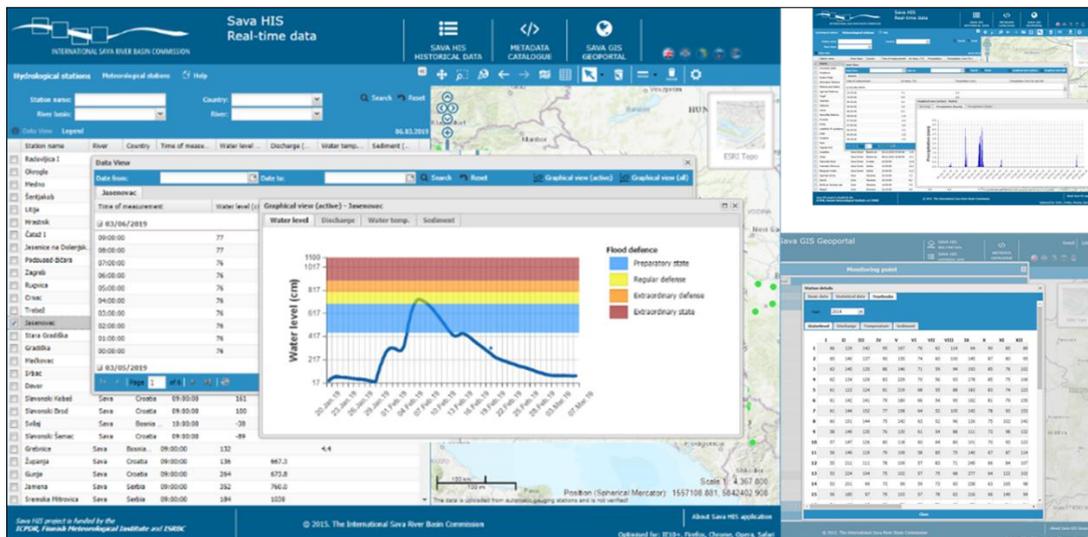
Existing navigation management applications (Navigation Safety Inspection; Development of the Marking Plan for the Sava River and its navigable tributaries) were successfully integrated into the Sava GIS platform. The ultimate goal - incorporating the data related to navigation in SavaGIS Geoportal by establishing the navigation module, is still pending for financial support. Once the activity is implemented, all remaining information related to navigation, such as the indicator of river kilometers and the album of bridges, will easily be transferred to Geoportal.

Preparatory activities for the development of the sediment management and APC modules are ongoing. Further plans related to upgrade of Sava GIS include development of advanced tools for mapping and reporting services and decision support system (DSS). Since the external technical support for the final deployment of described activities within the Sava GIS Geoportal is necessary, the project proposals (Project Fiche) was prepared and applied for the funding (DTP 3rd call).

ISRBC is one of the partners in the project titled Sustainable Historic Environments holistic reconstruction through technological enhancement and community-based resilience (SHELTER). SHELTER is approved by the Horizon 2020 Programme and, among other objectives, aims to collect data on cultural-historical heritage within the floodplains in the Sava River basin. Collected data will be consolidated in a properly structured way and stored in the existing Sava GIS geodatabase for use in flood impact analyses within the following cycles of flood risk management planning.

3.2. Hydrological and meteorological issues

Sava HIS, established for the purpose of implementation of the Policy on the Exchange of Hydrological and Meteorological Data and Information in the Sava River Basin (2014), represents a tool for collecting, storing, analyzing and reporting of hydrological and meteorological time series data on: precipitation, air temperature, snow depth, water level, discharge, water temperature, turbidity, as well as several statistical parameters and currently includes 305 hydrological and 195 meteorological gauges.



4. Cross - cutting and development issues

4.1. Climate change adaptation

Taking into account that the ISRBC is the signatory of Paris Pact on Water and Adaptation to Climate Change in the Basins of Rivers, Lakes and Aquifers due attention has been given to climate change issues. After the successful finalization of the Outline of the Climate Change Adaptation Strategy and priority measures for the Sava River Basin in FY 2017, the Outline and its findings have been presented on many occasions during the reporting period. At the same time, significant efforts were invested trying to find financial support for the development of the full-fledged strategy.

Climate change impacts were also addressed in the Sava FRMP, as noted earlier in the report.

4.2. Nexus assessments in the Sava River Basin

Following the assessment of the water-food-energy-ecosystems nexus in the Sava River basin in 2016 and the similar assessment of the Drina River Basin in 2017, the Drina Nexus follow up project funded by Italy and implemented by the UNECE Water Convention Secretariat has started. After the project preparation phase held in 2018 the activities will be focused to (1) improving bilateral monitoring and information exchange procedures, (2) assessing the status of erosion and sedimentation and anthropogenic impacts in the Drina basin and proposing priority measures to limit erosion, (3) reviewing relevant international experience and legal options for formalizing flow regulation for different needs and (4) organizing multi-stakeholder dialogues about sustainable renewable energy investment. The Drina nexus project will be further developed in 2019 and 2020. ISRBC has actively participated and provided assistance in carrying out this activity. The continuation of this cooperation is envisaged during the whole course of the project.

4.3. Sustainable river tourism

ISRBC has continued the efforts to gain the financial support for development of the sustainable river tourism. The project proposal *Danube EcoTOURism has been* prepared with several partners led by the European Wilderness Society (AT). The main objective of the project is to strengthen interregional cooperation to pursue joint and integrated approaches for the preservation and management of natural and cultural heritages and resources in the Danube region, by using sustainable ecotourism as a tool to achieve sustainable economic development and growth.

ISRBC is also the associated partner in the project *Balkan Bike: Sava cycling trail in the heart of the Balkans* led by Regional Development Agency Posavje (SI) with the main objectives to design long distance cycling route along the Sava River and to promote cycling as a sustainable mobility mode.

Both project proposals were submitted to the 3rd call of the DTP, and the decision on financial support is expected by the end of 2019.

4.4. Joint Plan of Actions for the Sava River Basin – subsequent activities

Joint Plan of Actions for the Sava River Basin (*JPA SRB*) was developed in spring 2017 and supported by the member states of ISRBC and Montenegro by the Joint Statement of the representatives of the Parties to the FASRB and Montenegro on Plan of Action and Milestones

for the Sava River Basin as a Catalyst for Cooperation in the region¹, adopted in Bled (SI) on June 15, 2017. JPA SRB outlines the path towards further development of the region. It contributes to the efforts of the Parties and Montenegro to ensure sustainable economic development and growth of the basin with aim to serve as a catalyst for enhancement of the cooperation in the region.

The World Bank, which supported the drafting of JPA SRB, in a certain way continued this effort by preparation of the Sava-Drina River Corridor Integrated Development Program. The long-term objective of the program is to foster regional cooperation and unlock productive investments. The Program specifically aims to support integrated management of the Sava and Drina corridors to (i) improve the protection of from floods, (ii) enhance the navigability of the Sava river with priorities given to the most critical sectors of the waterway, (iii) improve flood forecasting and management capacities among riparian countries, and enhance management and operations of Drina dams for hydropower production as well as flood and drought management, and (iv) enhance nature values and tourism. ISRBC has actively participated in the preparation of the Program, by providing necessary information and through meetings and dialogue with the World Bank representatives.

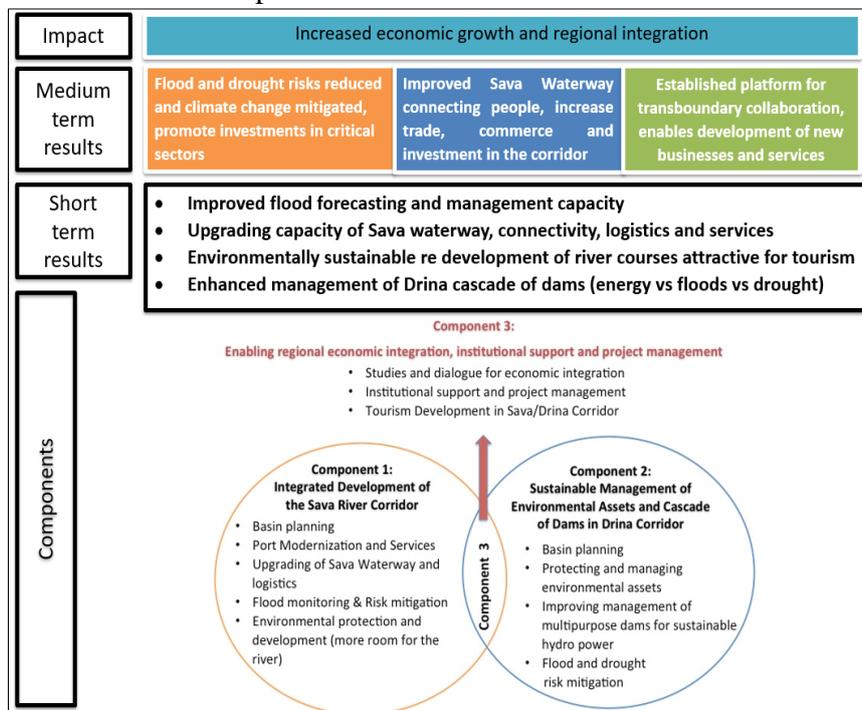


Figure 10. Overview of the Sava - Drina Corridor Program's result chain²

Intensive consultations on funding methods, the structures necessary for the implementation of program activities and the role of ISRBC are in progress.

¹ Joint Statement and JPA SRB is available here: <https://www.savacommission.org/publication>

² Source: Conceptual Outline of Sava - Drina River Corridor Integrated Development Program (WB: Oct. 2018)

5. Legal issues

FASRB establishes good grounds of cooperation in the region in a very ambitious and comprehensive manner that involves different sectors of administrations of the Parties, local authorities, stakeholders and NGOs. This improves collaboration, awareness, knowledge and capacity at cross-sectoral and multi-layered levels in each Party and in the regional context.

In the past years, significant efforts were invested by ISRBC to develop a proposal of certain amendments of the FASRB with aim to ensure additional efficiency in its implementation, by amending the procedure for adoption of the Sava RBM and FRM plans. The proposal was officially delivered to the Parties for consideration. ISRBC is still waiting for information on readiness of all Parties to conduct the final harmonization process.

FASRB, from the international law point of view represents a *pactum de contrahendo* - the agreement on liability to conclude additional protocols on certain specific issues of interest. The current status regarding the protocols to FASRB is provided in the following table.

Table 2. Overview of the status of the protocols to FASRB

Protocol on	Signed	In force since
Navigation Regime	Kranjska Gora, December 3, 2002	December 29, 2004
Prevention of Water Pollution caused by Navigation	Beograd, June 1, 2009	October 8, 2017
Flood Protection	Gradiška, June 1, 2010	November 27, 2015
Sediment Management	Brčko, July 6, 2015	October 8, 2017
Emergency Situations	Final harmonization is expected in 2019	
Transboundary Impact	Need for development of the protocol under reconsideration	

Besides the four above-mentioned protocols in force, the table provides information on the two protocols that need to be further discussed, either by means of the final harmonization or by reaching the consent about necessity/additional benefits of its development.

Protocol on Emergency Situations to FASRB comprises several goals aimed at the identification of hazardous activities, their character and possible consequences, prevention, emergency planning and preparedness, adequate alarm and warning system compatible with already existing systems on the wider basin level, assessment of extraordinary impacts, emergency response and mutual assistance of the Parties. Draft Protocol on Emergency Situations was adopted by ISRBC and distributed to the Parties for final review. Final harmonization of the Protocol is expected in due course.

Protocol on Transboundary Impacts to FASRB was initially meant to regulate the issues concerning the measures for securing the integrity of the water regime in the Sava River Basin and elimination or reduction of transboundary impacts on waters of other parties caused by economic and/or other activities. However, in the meantime, Espoo Convention, on which the protocol mostly leans, was ratified by all the Parties and the expert consultations were organized to reconsider the actual benefit of the draft protocol. It was concluded that the Protocol in its present form is no longer indispensable as an added value to the already existing mechanisms. For further consideration of the issue, a task group has been established by ISRBC. A final decision on the need for development of this protocol is expected in FY 2019.

6. Financial issues

6.1. Budget

At the 48th Session of ISRBC (Zagreb, February 20-21, 2018), the decision on adoption of Budget of ISRBC for Financial Year 2018 (April 1, 2018 – March 31, 2019), in the total amount of 546,100.00 Euro, was passed. The adopted Budget consists of the regular annual contributions in the amount of 515,960.00 Euro (128,990.00 Euro per country), of a transfer from the Reserve Fund in the amount of 20,140.00 Euro and of the Miscellaneous in the amount of 10,000.00 Euro

The list of the Parties' annual contributions and other inflows into the General Fund, as well as the list of expenses in FY 2018, can be seen in Tables 3 and 4.

Table 3. Received regular annual contributions and other inflows for FY 2018 (in Euro)

<i>Party</i>	<i>Inflows for FY 2018</i>
Bosnia and Herzegovina	128,990.00 ¹
Croatia	128,990.00 ²
Serbia	128,990.00 ³
Slovenia	128,990.00 ⁴
Total received amount of contributions	515,960.00
Transfer from the Reserve Fund	20,140.00 ⁵
Miscellaneous	10,073.12 ⁶
Total General Fund Inflow	546,173.12

Note: ¹ The contribution was paid on June 1, 2018. ² The contribution was paid in two equal parts, on March 19 and April 4, 2018. ³ The contribution was paid on June 14, 2018. ⁴ The contribution was paid on June 4, 2018. ⁵ Transferred amount for covering unexpected expenditures. ⁶ A part of the WBIF/DELTARES and GWP-Med grant funds for implementation of projects.

Table 4. Expenditures per basic intention in FY 2018 (in Euro)

<i>Budget Chapter</i>	<i>Expenditures¹</i>
Staff salaries and allowances	429.501,70
Current costs	29.305,09
Travel expenses	14.330,80
Operational costs	14.071,90
Equipment	1.778,52
Total expenditures	488.988,01²

Note: ¹ The amount of expenditures on March 31, 2019. ² In accordance with Financial Rules of ISRBC, the rest of the General Fund shall be allocated to the Reserve Fund.

6.2. Financing projects and studies within special funds

In FY 2018 the opening balance of the Special and Trust Fund amounts at 31.376,10 Eur. The additional inflow to this Fund during the period from April 1, 2018, to March 31, 2019 was 39,989.67 Euro for implementation of the following project activities:

- *Flood forecasting and warning system for the Sava River Basin (WBIF-DELTARES);*
- *Governance and Technology for Flood Risk Reduction: linking early warning to emergency management in the Sava River Basin - Workshop (UNESCO) and*
- *Study Visit of the North West Sahara Aquifer System Consultation Mechanism members to the International Sava River Basin Commission.*

For mentioned project activities the total outflow of Special and Trust Fund during FY 2018 was 39,994.66 Euro.

6.3. Audit of the financial management in FY 2017

In line with Financial Rules of ISRBC, a regular audit of the financial management of ISRBC for FY 2017 has been performed. ISRBC accepted the Report on Audit of the Financial Management of ISRBC in FY 2017 at the 50th Session (December 5-6, 2018).

7. Cooperation, promotion activities and stakeholder involvement

Cooperation of ISRBC with a large number of international organizations has been maintained during the reporting period, with a special emphasis on the organizations and institutions specified in Article 5 of FASRB.

ISRBC has maintained good contacts and cooperation with various EU bodies. It has continued active involvement in the implementation of the EU *Strategy for the Danube Region*, as well as in the process of drafting the new European legal framework in inland navigation. ISRBC also actively participated in several events and workshops organized by different EU bodies.

Cooperation with ICPDR and Danube Commission is formally based on the memoranda of understanding, signed with each of the two commissions, which provide opportunities for a close cooperation and coordination of activities of the commissions. In the reporting period, this coordination has been ensured by means of mutual participation at sessions, expert group meetings and other events. The process of implementation of *Joint Statement*, coordinated jointly by ICPDR, Danube Commission and ISRBC continued by organizing the 9th Joint Statement follow-up meeting, hosted by ICPDR in Vienna in September 2018. In addition, the two workshops: on climate change adaptation and a regional workshop on challenges and needs of the water and agriculture sectors have been co-organized with ICPDR in May 2018 and February 2019, respectively.

Cooperation is being maintained with other navigation commissions (i.e. CCNR and Mosel Commission), and other river and lake protection commissions (e.g. commissions for the protection of the rivers Rhine, Elbe, and Odra).

A fruitful cooperation has been continued with International Network of Basin Organizations (INBO) as well as with UNESCO.

Cooperation with UNECE has also been continued. In addition to a regular participation of ISRBC in the framework of the UNECE working groups and other events, the two organizations have cooperated in the implementation of the Drina River Basin Nexus Assessment.

There has also been a continued cooperation with regional organizations (UNDP, OSCE, RCC, REC, GWP-Med, GWP-CEE), international financial institutions and cooperation agencies (WB), specialized organizations, associations and groups (WMO, GIS Forum), business sector (Coca-Cola) and NGOs (WWF, Euronatur, etc.). Finally, contacts have been continued with the Diplomatic Corps in the Republic of Croatia.

An increased interest for work of ISRBC has been expressed from many regions. In the reporting period ISRBC hosted and presented its work to North West Sahara Aquifer System Consultation Mechanism and the representatives of water administration of Poland.

In addition to the cooperation related to the FASRB implementation in general, a particular attention in collaboration with the institutions of the Parties has been paid to:

- activities related to development of Sava FFWS and Sava FRMP (ministries of the Parties responsible for water management and environment and institutions responsible for flood forecasting);
- rehabilitation and development of navigation on the Sava River (ministries of the Parties responsible for inland waterway transport);
- preparation of the *FASRB*-related regional projects (all involved ministries), and
- preparatory activities on the organization of the Sava Day celebration and other PR activities related to the *FASRB* implementation (ministries, nominated representatives of the Parties).

In addition to the national institutions responsible for implementation of *FASRB*, a cooperation has been kept with other organizations, such as water agencies, NHMSs, inland waterway agencies, port master offices, registers of shipping, regional chambers of commerce, tourist organizations, faculties and institutes dealing with natural and technical sciences, etc. Apart from the institutions of the Parties, good co-operation has been maintained with the relevant bodies of Montenegro.

Taking into account the significance of stakeholders' involvement within the framework of activities of ISRBC and implementation of *FASRB*, the cooperation with relevant institutions, NGOs and local actors from the basin has been continued throughout the reporting period.

In FY 2018, the information on the *FASRB* implementation was provided to stakeholders and wider public via:

- Official web-site of ISRBC (www.savacommission.org), where the information on the activities, projects and documents, are made available to wider public and continuously upgraded with the most recent facts and news;
- Trainings, workshops and forums, organized or co-organized by ISRBC;
- Press-releases and media briefings, on the events organized by ISRBC;
- Various reports and publications;
- Contributions to projects, bulletins and web-sites of other organizations/institutions;
- Presentations of the work of ISRBC on different events;
- web-site of the Sava Youth Parliament (<http://sava-youthparliament.com>) and its Facebook, which was setup to ensure permanent communication with, and among, the youth throughout a year;
- The Sava Day 2018 celebration.

Consultation activities have been performed by organizing consultation workshops, public presentations and other meetings with stakeholders (listed in Annex III), as well as the consultations on the ISRBC web-site, in regard with different activities (i.e. development of the first Sava FRMP).

Active involvement of stakeholders has been ensured primarily for the national bodies responsible for the *FASRB* implementation, and the institutions / organizations having the observer status in ISRBC, through their participation at the meetings of the Parties, sessions of ISRBC, and meetings of the ISRBC expert groups.

ANNEXES

ANNEX I. List of the ISRBC members and deputy members

Name and surname	Function	Institution
Bosnia and Herzegovina		
Igor Pejić	Member to ISRBC - Chairman of the ISRBC	Ministry of Communications and Transport of Bosnia and Herzegovina
Boško Kenjić	Deputy Member to ISRBC	Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina
Republic of Croatia		
Maja Markovčić Kostelac	Member to ISRBC <i>until February 14, 2019</i>	Ministry of the Sea, Transport and Infrastructure of the Republic of Croatia
Duška Kunštek	Member to ISRBC <i>as of February 14, 2019</i>	Ministry of the Sea, Transport and Infrastructure of the Republic of Croatia
Elizabeta Kos	Deputy Member to ISRBC	Ministry of Environment and Energy of the Republic of Croatia
Republic of Serbia		
Nataša Milić	Member to ISRBC	Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia, Republic Water Directorate
Veljko Kovačević	Deputy Member to ISRBC	Ministry of Construction, Transport and Infrastructure of the Republic of Serbia
Republic of Slovenia		
Mitja Bricelj	Member to ISRBC	Ministry for Environment and Spatial Planning of the Republic of Slovenia
Marko Sotlar	Deputy Member to ISRBC	Ministry of Foreign Affairs of the Republic of Slovenia

ANNEX II. List of the national institutions responsible for implementation of the FASRB

No.	Institution	Contact details
Bosnia and Herzegovina		
1.	Ministry of Communications and Transport of Bosnia and Herzegovina	Trg Bosne i Hercegovine 1, 71000 Sarajevo Tel: +387 33 219 923
2.	Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina	Musala 9, 71000 Sarajevo Tel: +387 33 219 923
3.	Ministry of Agriculture, Forestry and Water Management of the Republic of Srpska	Trg Republike Srpske 1, 78000 Banjaluka Tel: + 387 51 338 415
4.	Federal Ministry of Agriculture, Water Management and Forestry	Marka Marulića 2, 71000 Sarajevo Tel: +387 33 726 551
5.	Ministry of Transport and Communications of the Republic of Srpska	Trg Republike Srpske 1, 78000 Banjaluka Tel: +387 51 339 404
6.	Federal Ministry of Transport and Communications	Braće Fejića bb, 88000 Mostar Tel: +387 36 550 025
7.	Ministry of Spatial Planning, Civil Engineering and Ecology of the Republic of Srpska	Trg Republike Srpske 1, 78000 Banjaluka Tel: +387 51 339 487
8.	Federal Ministry of Environment and Tourism	Marka Marulića 2, 71000 Sarajevo Tel: +387 33 726 700
9.	Government of the Brčko District	Bulevar mira 1, 76100 Brčko Tel: +387 49 240-600
Republic of Croatia		
1.	Ministry of the Sea, Transport and Infrastructure of the Republic of Croatia	Prisavlje 14, 10000 Zagreb Tel: +385 1 6169 111
2.	Ministry of Environment and Energy of the Republic of Croatia	Radnička cesta 80, 10000 Zagreb Tel: +385 1 3717 111
Republic of Serbia		
1.	Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia	Bulevar umetnosti 2a 11070 Novi Beograd Tel: +381 11 2013 360
2.	Ministry of Construction, Transport and Infrastructure of the Republic of Serbia	Nemanjina 22-26, 11000 Beograd Tel: +381 11 3619 833
3.	Ministry of Foreign Affairs of the Republic of Serbia	Kneza Miloša 24-26, 11000 Beograd Tel: +381 11 3616 333

No.	Institution	Contact details
4.	Ministry of Environmental Protection of the Republic of Serbia	Omladinskih brigada 1, 11070 Novi Beograd Tel: +381 11 3110 271
5.	Directorate for Inland Waterways	Francuska 9, 11000 Beograd Tel:+381 11 30 29 800
6.	Republic Hydro-meteorological Service of Serbia	Kneza Višeslava 66, 11000 Beograd Tel: +381 11 3050 864
7.	Republic Geodetic Authority	Bulevar vojvode Mišića 39, 11000 Beograd Tel: +381 11 265 22 22
Republic of Slovenia		
1.	Ministry for Environment and Spatial Planning of the Republic of Slovenia	Dunajska cesta 47, 1000 Ljubljana Tel: +386 1 478 70 00
2.	Ministry of Foreign Affairs of the Republic of Slovenia	Prešernova cesta 25, 1000 Ljubljana Tel: +386 1 478 2000
3.	Ministry of Economic Development and Technology of the Republic of Slovenia	Kotnikova 5, 1000 Ljubljana Tel: +386 1 400 33 11
4.	Ministry of Infrastructure of the Republic of Slovenia	Langusova ulica 4, 1535 Ljubljana Tel:+386 1 478 80 00

ANNEX III. List of the events organized/co-organized by ISRBC in FY 2018

No.	Meeting	Date	Venue	Organizer
1	22 nd PEG APC meeting	11 April 2018	Zagreb	ISRBC
2	Meeting with Swiss Agency for Development and Cooperation (SDC)	16 April 2018	Zagreb	ISRBC
3	33 rd PEG FP meeting	26 April 2018	Zagreb	ISRBC
4	Meeting with US EPA and REC	10 May 2018	Zagreb	ISRBC
5	Sava HEC RAS workshop	15-17 May 2018	Zagreb	ISRBC, US Gov.
6	Celebration on the occasion of finalizing the 2nd phase of the US Gov. support	18 May 2018	Zagreb	ISRBC, US Embassy
7	1 st meeting with the representatives of the countries regarding the Sava FFWS post-project organization	21 May 2018	Zagreb	ISRBC
8	36 th PEG RBM meeting	23-24 May 2018	Zagreb	ISRBC
9	Workshop on climate change adaptation	24-25 May 2018	Zagreb	ISRBC, ICPDR
10	7 th Youth Parliament	01-02 June 2018	Bohinj	ISRBC
11	7th Meeting of the Parties	07 June 2018	Bled	ISRBC, Slo. Gov.
12	2 nd meeting with the representatives of the countries regarding the Sava FFWS post-project organization	12 June 2018	Zagreb	ISRBC
13	34 th PEG FP Meeting	20-21 June 2018	Zagreb	ISRBC
14	49th Session of ISRBC	03-04 July 2018	Karlovac	ISRBC
15	35 th PEG FP Meeting	23-24 July 2018	Zagreb	ISRBC
16	18 th PEG GIS meeting	25-26 July 2018	Sarajevo	ISRBC
17	36 th PEG FP Meeting	30 August 2018	Zagreb	ISRBC

No.	Meeting	Date	Venue	Organizer
18	Preparatory meeting on the Protocol on Emergency situations	09 September 2018	Zagreb	ISRBC
19	Roundtable on the need for development of the Protocol on Transboundary impacts	10 September 2018	Zagreb	ISRBC
20	9 th Joint Statement on Guiding Principles for development of inland navigation and environmental protection in the Danube Basin follow up meeting	13-14 September 2018	Vienna	ISRBC, ICPDR, DC
21	5 th Ad hoc RIS EG meeting	18 September 2018	Zagreb	ISRBC
22	21 st PEG NAV meeting	19-20 September 2018	Zagreb	ISRBC
23	3 rd meeting of Task Group for sustainable tourism development	01 October 2018	Zagreb	ISRBC
24	37 th PEG FP Meeting	02 October 2018	Zagreb	ISRBC
25	1 st Meeting of the Task group for the Sava FFWS post-project organization	04 October 2018	Zagreb	ISRBC
26	Sava FFWS project closing event	25 October 2018	Zagreb	ISRBC, WB,
27	13 th Meeting with Captains from the Port Master Offices	29-30 October 2018	Bajina Bašta	ISRBC
28	Study visit of North West Sahara Aquifer System Consultation Mechanism	07-09 November 2018	Zagreb	ISRBC, GWP-Med
29	2 nd Meeting of the Task group for the Sava FFWS post-project organization	13 November 2018	Zagreb	ISRBC
30	Stakeholder Forum on the draft Sava FRMP	14-15 November 2018	Belgrade	ISRBC, WB, Eptisa
31	Meeting on Marking and Reporting on Waterway Condition on the Sava River	23 November 2018	Sl. Brod	ISRBC
32	37 th PEG RBM Meeting	27-28 November 2018	Zagreb	ISRBC
33	23 rd PEG APC Meeting	29 November 2018	Zagreb	ISRBC
34	50th Session of ISRBC	04-05 December 2018	Zagreb	ISRBC
35	12 th Ad hoc FIN EG Meeting	10 December 2018	Zagreb	ISRBC

No.	Meeting	Date	Venue	Organizer
36	38 th PEG FP Meeting	13-14 December 2018	Zagreb	ISRBC
37	15 th PEG HMI Meeting	24 January 2019	Zagreb	ISRBC
38	3 rd Meeting of the Task group for the Sava FFWS post-project organization	25 January 2019	Zagreb	ISRBC
39	39 th PEG FP Meeting	07-08 February 2018	Zagreb	ISRBC
40	4 th Meeting of the working group for the Sava FFWS post-project organization	12 February 2019	Zagreb	ISRBC
41	19 th PEG GIS meeting	18-19 February 2019	Zagreb	ISRBC
42	38 th PEG RBM meeting	19-20 February 2019	Zagreb	ISRBC
43	Regional Workshop on challenges and needs of the water and agriculture sectors	20-21 February 2019	Zagreb	ISRBC, ICPDR,
44	Meeting of the ISRBC and ICPDR Secretariats	25-26 February	Karlovac	ISRBC
45	7 th Meeting of the Navigation Committee	28 February 2019	Zagreb	ISRBC
46	51st Session of ISRBC	05 -06 March 2019	Zagreb	ISRBC
47	Study visit of the Polish water management sector representatives	27 -28 March 2019	Zagreb	ISRBC

ANNEX IV. List of the FASRB-related projects implemented or ongoing in FY 2018

No	Project title	Status	Remark on the status / Implementation period	Lead partner(s) / Consultant	Budget (k€)	Funding source	
1	Towards practical guidance for sustainable sediment management using the Sava River Basin as a showcase	Ongoing	Started in April 2012; Step 1: SSM course-Part 1- finished Step 2: guidance application- under implementation; Step 3: SSM course-Part 2- fund-raising in progress Step 4: continuation of guidance application- not started yet Step 5: Final workshop- planned after finalization of previous steps	UNESCO, ISRBC	225.0	UNESCO, Sed-Net	
2	Assessing the water-food-energy-ecosystems nexus and benefits of transboundary water cooperation in the Drina River Basin - follow up	Ongoing	2019-2020	UNECE	N/A	Italian Gov.	
3	2 nd phase of the U.S. Government support to flood modelling activities in the Sava River Basin (including Sava LiDAR project & purchase of IT equipment)	Implemented	Started in Dec 2014; Hydrological model, Hydraulic model, LiDAR data, IT equipment delivered to the Parties;	USACE, ISRBC	N/A	U.S. Gov.	
4	Improvement of joint flood management actions in the Sava River Basin	Preparation of the Flood Risk Management Plan for the Sava River Basin - Sava FRMP	Implemented	Started in March 2017; Final draft of the Sava FRMP and background documents prepared, translated and delivered for approval; the Sava GIS FRMP database implemented along with the technical and user documentation; Printing and dissemination after official adoption of Sava FRMP by the Parties and Montenegro	EPTISA Servicios de Ingenieria S.L, ES	Est. 2,000.0	Western Balkans Investment Framework, implemented by World Bank
		Development of the Flood Forecasting and Warning System for the Sava River Basin - Sava FFWS	Implemented	Started in June 2016; 3 pre-releases, Release 1.0 including testing and Release 2.0 implemented and handed over to the Parties and Montenegro along with the technical and user documentation; Sava HIS upgrade implemented; Workshops and User trainings implemented; Development and signing of the MoU on cooperation on regular functioning and maintenance of the Sava FFWS ongoing;	Deltares, NL; Royal Haskoning DHV, NL; Eptisa, ES; HEIS, BA		

No	Project title	Status	Remark on the status / Implementation period	Lead partner(s) / Consultant	Budget (k€)	Funding source
5	Rehabilitation of the Sava River Waterway on the Sector Jaruge - Novi Grad	Ongoing	Contract for preparation of the design documentation and EIA signed on 20 Dec 2018. Kick off meeting held on 04 Feb 2019.	IGH d.o.o., Zagreb Hidrokonzalt d.o.o., Zagreb Elektroprojekt d.d., Zagreb	648,8	EC (CEF HR)
6	Implementation of RIS on the Sava river	Ongoing	In Serbia, implemented	Plovput, RS	1,100.0 [~]	EC
			In Croatia, implementation finished in 2016	RGO komunikacije, HR	1,360.0	EC (IPA HR)
			In B&H, fund-raising in progress		240.0	HR

ANNEX V. List of the FASRB-related project proposals prepared in FY 2018

No	Project title	Duration	Budget (k€)	Possible funding source	Lead partner/ role of ISRBC	Status
1	Development of technical basis for international river basin management planning in the Sava River Basin: An innovative filling of gaps in transboundary water	2.5 years	2,020	EEA and Norway Grants Fund	Environmental institute (SK)/ ISRBC is Expertise Partner	Project proposal prepared and submitted to the 1 st call for proposals of EEA and Norway Grants Fund (deadline 01 July 2018). It passed the 1 st stage of evaluation. Full proposal has to be submitted until 04 of July 2019.
2	Efficient, innovative and regionally harmonized national flood warning procedures in the Sava River Basin - SAVA WAPROC	3 years	~ 2,220	EEA and Norway Grants Fund EU funds WBIF	Ministry of the Environment and Spatial Planning (SI)/ ISRBC is Expertise Partner	Project application prepared and submitted to EEA and Norway Grants Fund. Not selected for the 2 nd stage.
3	Inter-sectoral approach with hydropower and navigation sectors for operative flood prevention measures in Sava River Basin - INAS	2.5 years	1,400	EU funds (e.g. DTP)	Institute for Water of the Republic of Slovenia/ ISRBC is a Project Partner	Project proposal available; Project application submitted to the 3 rd DTP call in March 2019
4	Sustainable Historic Environments holistic reconstruction through Technological Enhancement and community based Resilience - SHELTER	4 years	5,999 (0,209)	EU funds (H2020)	Tecnalia (Spain)/ ISRBC is a Project Partner	Project approved by EU H2020 Programme. ISRBC is one of the project partners with the main goal to implement the non-structural measures proposed by the draft Sava FRMP.
5	Water contingency management plan for the Sava River Basin - WACOM	2.5 years	~1,700	EU funds (e.g. DTP), GEF	University of Ljubljana/ ISRBC is a Project Partner	Project proposal available; Project application submitted to the 3 rd DTP call in March 2019

No	Project title	Duration	Budget (k€)	Possible funding source	Lead partner/ role of ISRBC	Status
6	Danube Ecotour innovation	2.5 years	~ 1,200	EEA and Norway Grants Fund	Ferto-Hansag National Park Directorate (HU)/ ISRBC is Expertise Partner	Project application prepared and submitted to EEA and Norway Grants Fund. Not selected for the 2 nd stage
7	Danube EcoTOURism	2.5 years	~ 2,000	EU funds (e.g. DTP)	European Wilderness Society (AT)/ ISRBC is a Project Partner	Project proposal submitted to the 3 rd DTP call.
8	Balkan Bike: Sava cycling trail in the heart of the Balkans		~ 2,000	EU funds (e.g. DTP)	Regional Development Agency Posavje (SI)/ ISRBC is Associated Project Partner	Project proposal submitted to the 3 rd DTP call.

ANNEX VI. Overview of the activities within the Sava Day 2018 celebration

Introduction

The celebration of Sava Day in 2018 included the events directly organized by ISRBC, and the events organized through national projects of the Parties.

Besides the Seventh meeting of the Parties, held on June 7 2018, the following events were organized as a part of celebrating Sava Day:

- Seventh meeting of the Youth Parliament of the Sava River Basin (2018)
- Bled Water Festival (2018)
- Event organized by “Slap”
- Mojareka.si
- Od izvora do mora

Youth Parliament 2018

The 7th meeting of the Youth Parliament of the Sava River Basin (*Youth Parliament*) was held on the June, 1 and 2, 2018 in Bohinj (SI). Schools which had been selected on the basis of applications received covering the main topic *Sustainable Tourism - Opportunity for the Development of the Sava River Basin* were: Secondary school for Catering and Tourism from Ljubljana, Biotechnical Education Center Ljubljana - Food Technology school, School of Economics, Trade and Hospitality from Samobor, Administrative school from Zagreb, Secondary school Ivan Goran Kovačić from Kiseljak, Secondary Technical School from Gradiška, High school Partijarh Pavle from Belgrade and Palanačka High school from Smederevska Palanka.



Figure VI-1. Participants of the Youth Parliament 2018

The basic aim of 2018's Youth Parliament was that young people get the knowledge on the exceptional tourist potentials of the Sava River Basin. Young people discussed possibilities of developing tourism in their local areas in connection with the development of sustainable tourism at the level of the Sava River Basin.

The main messages of the parliament were related to the connection of tourism with local identity and tourist products with nature and to increase quality of tourist offer with properly targeted information and education at all levels.

The new Presidency of the Youth Parliament was elected, with Ana Kambič from Slovenia acting as the President.

The sponsors of Youth Parliament were UNDP in Bosnia and Herzegovina, Coca-Cola HBC

Adria and ISRBC.

More information is available at the web site of [ISRBC](#) and the [web site](#) and [Facebook](#) of the Youth Parliament

Bled Water Festival

Bled Water Festival (BWF) was held on June 7 and 8, 2018. The main purpose of the BWF is to raise public awareness about water issues in Slovenia, as well as in other parts of the world, provide solutions and work on its development. On the first day, president of the Youth Parliament participated at the panel discussion on *How to deliver knowledge and how to include young people into the story of WATER*, together with representatives of Ministry of Environment and Spatial Planning, Biotechnical faculty, Geneva Water Hub, ABCI-India and Petrol. Back to back to the BWF, president also participated at the round table *Water for Sustainable Development* organized by GWP CEE.

Event organized by Slap

The event, organized by the Association for Preservation of Croatian Waters and Sea – Slap, within the celebration of the Sava Day, was held on 01 July 2018 on the banks of the Sava River near the railway bridge in Zagreb. The event was attended by representatives of ISRBC, the Ministry of Environmental Protection and Energy of the Republic of Croatia, the City Office for Strategic Planning and Development of the City of Zagreb and a representative of the project *Zagreb on the Sava River*. The representative of ISRBC presented the latest activities of ISRBC and briefly demonstrated the functioning of the hydraulic model of the Sava River. The demonstration of new rescue boats of the Croatian Army and the canoeing of the Canoe Club Končar was held during the event.

Events organized by the Parties to FASRB

In addition to the events organized by ISRBC, a number of activities were performed through national projects of the Parties, in which the Sava Commission was involved as a partner or a guest, depending on the type of a project:

- In Slovenia, the Sava day was celebrated by the final event of the contest *Mojareka.si* which was held on June 2, 2018 in Medvode. The initiator of the event was the Slovenian branch of the Coca-Cola Corporation in Slovenia, supported by Ministry of the Environment and Spatial Planning, Tourist Association of Slovenia ISRBC. The contest connects organizers of cleaning actions at the rivers and their banks. This year 11 000 participants have collected more than 80 tons of various wastes along the 360 km of watercourses. The winner was Municipality of Žalec, followed by the Tourist Association Zalog, and the secondary school from Krško. More information of the event is available at the [Mojareka.si](#).
- In Croatia, the project *Lijepa naša Sava* has been substituted by the project *Od izvora do mora*. The project of socially responsible business is directed to the preservation and cleaning along Croatian waters - rivers, lakes and coasts of the Adriatic Sea. The project was launched by Coca-Cola in Croatia in cooperation with partners - Ministry of Environmental Protection and Energy, Ministry of Tourism, Ministry of the Sea, Transport and Infrastructure, Ministry of Agriculture, Environmental Protection and Energy Efficiency Fund, Croatian National Tourist Board, Croatian Waters, Croatian County Council, Association of Cities in the Republic of Croatia, Ruđer Bošković Institute and ISRBC. More information with the calendar of events is available at the [Od izvora do mora](#).

ANNEX VII. List of Acronyms & Abbreviations

AEWS	Accident Emergency Warning System
AMI	Area of mutual interest (for flood protection)
APC	Accident Prevention and Control
ARSO	Slovenian Environment Agency
AT	Austria
BA, B&H	Bosnia and Herzegovina
BWF	Bled Water Festival
CESNI	European Committee for drawing up standards in the field of inland navigation
DC	Danube Commission
DHMZ	Croatian Meteorological and Hydrological Service
DTP	Danube Transnational Programme
EC	European Commission
EEA	European Economic Area
EG	Expert Group
Espoo Convention	Convention on Environmental Impact Assessment in a Transboundary Context
EU	European Union
EUSDR	EU Strategy for the Danube Region (Danube Strategy)
FASRB	Framework Agreement on the Sava River Basin
FEWS	Flood Early Warning System
FFWS	Flood Forecasting and Warning System
FHMZ	Federal Hydrometeorological Service
FIN	Financial (issues)
FP	Flood Prevention
FRM	Flood Risk Management
FY	Financial Year
GEF	Global Environment Facility
GIS	Geographic Information System
GWP CEE	Regional Partnership of GWP for Central and Eastern Europe
GWP-Med	Mediterranean Regional Partnership of GWP
HEC-RAS	Hydrologic Engineering Center's River Analysis System
H&H	Hydrological and Hydraulic
HIS	Hydrological Information System

HM(I)	Hydrological and Meteorological (issues)
HR	Republic of Croatia
ICPDR	International Commission for the Protection of the Danube River
INBO	International Network of Basin Organizations
IPA	Instrument for Pre-Accession Assistance
ISRBC	International Sava River Basin Commission
JPA SRB	Joint Plan of Actions for the Sava River Basin
LiDAR	Light Detection and Ranging
LNG	Liquefied Natural Gas
ME	Montenegro
NAV	Navigation
NGO	Non-Governmental Organization
NHMS	National Hydro-Meteorological Service
PEG	Permanent Expert Group
PIAC	Principal International Alert Centre
RBM	River Basin Management
RBMP	River Basin Management Plan
RCC	Regional Cooperation Council
REC	Regional Environmental Center
RHMZ	Republic Hydrometeorological Service (of Serbia or Republika Srpska)
RIS	River Information Service
RS	Republic of Serbia
SI	Republic of Slovenia
SRBA	Sava River Basin Analysis
SWMI	Significant Water Management Issues
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
USACE	United States Army Corps of Engineers
U.S. Gov	Government of the United States of America
WB	World Bank
WBIF	Western Balkans Investment Framework
WFD	Water Framework Directive
WMO	World Meteorological Organization
WWF	World Wide Fund for Nature
ZHMS	Institute of Hydrometeorology and Seismology of Montenegro