



INTERNATIONAL SAVA RIVER BASIN COMMISSION

ANNUAL REPORT
on work and activities of the
International Sava River Basin Commission
for the period April 1, 2020 until March 31, 2021

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Introduction

General tasks and competencies of International Sava River Basin Commission (*ISRBC, Sava Commission*) are stipulated by the Framework Agreement on the Sava River Basin (*FASRB, Framework Agreement*) 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 concerning 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 2020 - March 31 2021 (Annual Report)* has been prepared accordingly.

Annual report corresponds to the Financial Year 2020¹. All the work programs and plans mentioned throughout the report also correspond to the financial year stated.

As an important introductory note, this reporting period practically corresponds with the beginning of the COVID-19 pandemic. As a result, in accordance with the epidemiological situation, work of both the Sava Commission and its Secretariat as permanent body has adjusted to the situation at hand. In order to ensure proper operations of the Sava Commission and all its expert bodies under such circumstances, information infrastructure at the headquarters of the Commission has been upgraded. This made it possible to organize meetings and other events, while joint work on documents has also substantially improved. Despite all the difficulties confronted so far, this will nonetheless represent an additional value even after the pandemic and after the termination of the current measures.

In the period covered by this Report, the Sava Commission held three regular sessions and one strategic meeting, in the so-called hybrid format; some participants were thus directly participating in the events at ISRBC headquarters, while others were involved via an online platform (Figure 1).

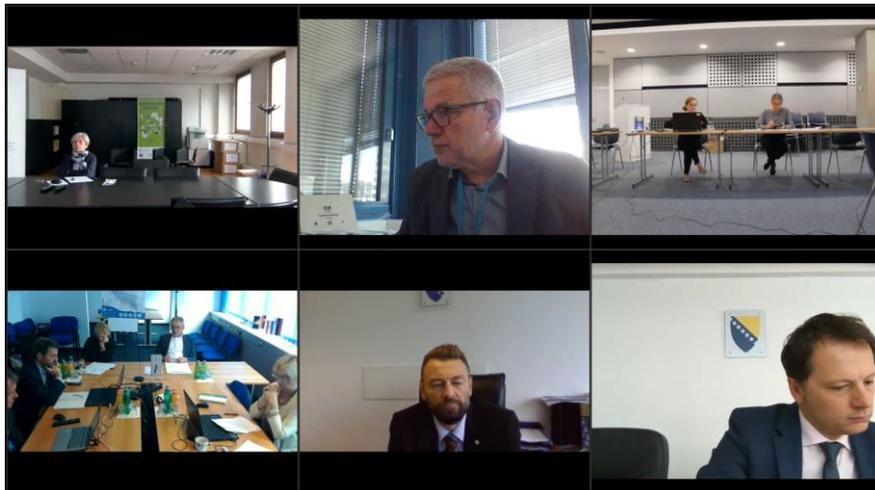


Figure 1. 55th ISRBC Session – 29-30 September 2020

We also modestly marked an important anniversary of 15 years since the foundation of the Sava Commission, which was established as a permanent body on 27-29 June, 2005. Since organizing a central celebration was not possible, promotional materials were prepared on the occasion, as well as a special issue of the Sava NewsFlash, with detailed portrayals of key events and achievements in cross-border cooperation of countries sharing the Sava River

¹ Financial Year of the ISRBC starts on April 1 of the current year and ends on March 31 next year

Basin. According to general opinion, in the period so far, ISRBC has profiled itself as an international body successfully and pragmatically achieving its defined objectives, while adhering to the principles and mechanisms of cooperation defined by the Framework Agreement.

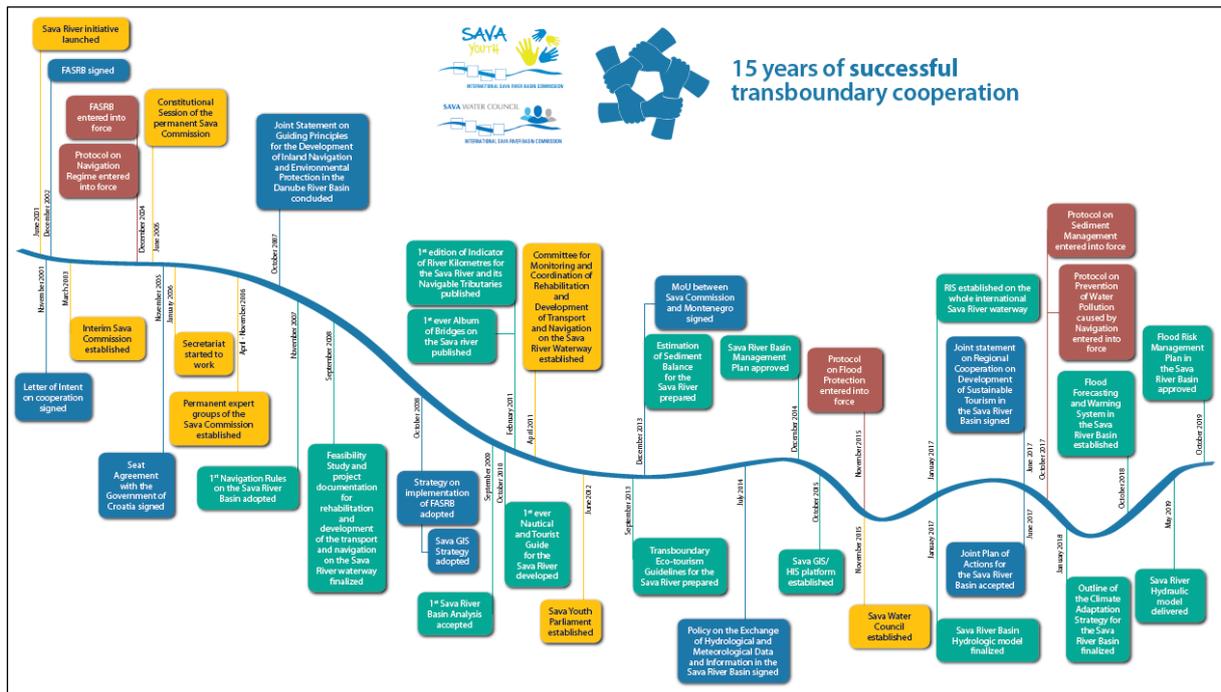


Figure 2. 15 years of the Sava Commission

Despite the difficulties in terms of normal functioning, as elaborated above, substantial progress has nonetheless been achieved in all areas of activity of the Commission, with detailed overview of progress provided in Chapters 1 to 6 of this Report; in addition, useful information is also provided in Annexes to the Report.

1. Integrated water management

In the reporting period, ISRBC was focused on continuation of activities related to all aspects of integrated water management, in particular the preparation of the second river basin management plan, continuation of activities in flood risk management and sediment-related issues, as well as on the development of linked integrated systems. Substantial efforts and resources have been invested in preparation of various projects and project proposals, aiming to support the current and planned activities.

1.1. River basin management

Development of Sava River Basin Management Plan (*Sava RBMP*) is required by Article 12 of the FASRB, and it represents the most important task in terms of achieving one of the key goals of the Framework Agreement - establishment of sustainable water management in the Sava River Basin. After the first *Sava RBMP* was approved at the 5th Meeting of the Parties (in Zagreb, on 2 December 2014), activities of the second RBM planning cycle began in 2015 and resumed with the preparation of the second Sava River Basin Analysis Report (2nd SRBA), Interim Overview of the Significant Water Management Issues in the basin (*SWMI*), Outline of the 2nd *Sava RBMP*, and continued in FY 2020 with activities aimed at the preparation of the 2nd *Sava RBMP* itself.

In FY 2020, expert groups of the Sava Commission (PEG RBM and PEG GIS) actively worked on the preparation of the 2nd *Sava RBMP*, including the collection of relevant data from competent institutions of the Parties and Montenegro. The first draft of the document has been prepared during the reporting period, as well as preliminary set of maps for the 2nd *Sava RBMP*. Finalization of draft of the 2nd *Sava RBMP* and initiation of public consultation procedure are expected in the autumn of 2021, while approval of the Plan by Parties to the Framework Agreement is planned for 2022. It is important to stress that this extensive work is being performed by the Secretariat of the Sava Commission and experts from Sava River Basin countries, without external financial support.

In September 2020, the Sava Commission adopted the Program for Development of Sediment Management Plan in the Sava River Basin, which contains a description of main activities, mechanisms of their implementation and provisional deadlines. With the support of the UNESCO Venice Office, activities towards the preparation of the *Outline of the Sediment Management Plan for the Sava River Basin* are ongoing, and finalization is expected in the autumn of 2021.

Pursuant to the Protocol on Sediment Management, the Parties are obliged to deliver information concerning sediment dredging performed in the previous year and data on planned dredging during the current year. Based on the delivered data, the Sava Commission prepared reports on sediment dredging in 2019 and planned dredging in 2020 and delivered them to competent institutions of the Parties. According to the collected data, almost 1.9 million m³ was dredged in 2019. Quantities of planned and executed sediment dredging per country in 2019 are provided in the following Figure:

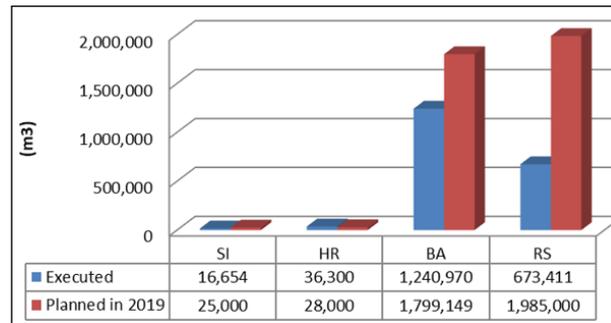


Figure 3. Planned and executing sediment dredging in 2019

1.2. Flood management

Immediately upon approval of the *Flood Risk Management Plan in the Sava River Basin (Sava FRMP)* at the 8th Meeting of the Parties to the FASRB, held in Sarajevo on 24 October 2019, activities within the second planning cycle began and then continued throughout FY 2020.

Initial draft of the second report on Preliminary Flood Risk Assessment in the Sava River Basin (Sava PFRA) has already been prepared, and necessary data and information from countries in the Sava River Basin are continuously collected in order to complete the report. In report preparation and implementation of the required analyses, particular attention is paid to issues of flood risk in *Areas of Mutual Interest (AMI)* in the Sava River Basin identified in the first Plan. These areas will also be revised, in accordance with implemented analyses of *Areas of Potential Significant Flood Risk (APSF)* per country. Even though analyses in AMIs will be performed for all risk receptors determined by the Plan, particular attention is dedicated to issues of direct and indirect effects of flood hazard on cultural and historical heritage, which is a matter analyzed through the current project *Sustainable Historic Environments holistic reconstruction through Technological Enhancement and community based Resilience* (SHELTER: <https://shelter-project.com/>).

The SHELTER project, which includes the Sava River Basin as one of five case studies (so-called Open Lab areas), will serve to implement the following main activities:

- collection of data on cultural-historical heritage laying in flood-prone areas;
- conducting of flood impact analyses on the identified heritage sites;
- networking between different sectors relevant for the project activities (water/floods, cultural-historic heritage and emergency management);
- continuous exchange of knowledge within the Sava Open Lab as well as exchange of best practices and peer-learning processes between all other project case studies.

So far, data on 1210 cultural and historical sites in AMIs in the territory of five Sava countries has been collected within the project. The data is consolidated within the GIS environment and prepared for integration into the Sava GIS. This spatial data will also serve to perform analyses of flood impact on cultural and historical heritage in the Sava River Basin, and methodology for this purpose will also be developed as part of the SHELTER project.

Three workshops have been held so far in order to network various sectors relevant for project activities and to exchange knowledge and best practice, involving the participation of representatives of all three relevant sectors, on average from 20 competent institutions of six countries sharing the Sava River Basin, including Albania.



Figure 4. Photo illustration of several events organized by ISRBC within the SHELTER project

The project will continue in the following years, until May 2023, and it will substantially contribute to understanding of direct and indirect effects of flood hazards on cultural and historical assets.

Following the successful establishment of the *Sava FFWS* towards the end of 2018, the system continues to be regularly used by relevant national organizations (9 institutions from 5 countries responsible for flood forecasting), while ISRBC continuously monitors its functionality. According to general assessment, this system is unique even at the global level, and it represents major added value to national forecasting centres.

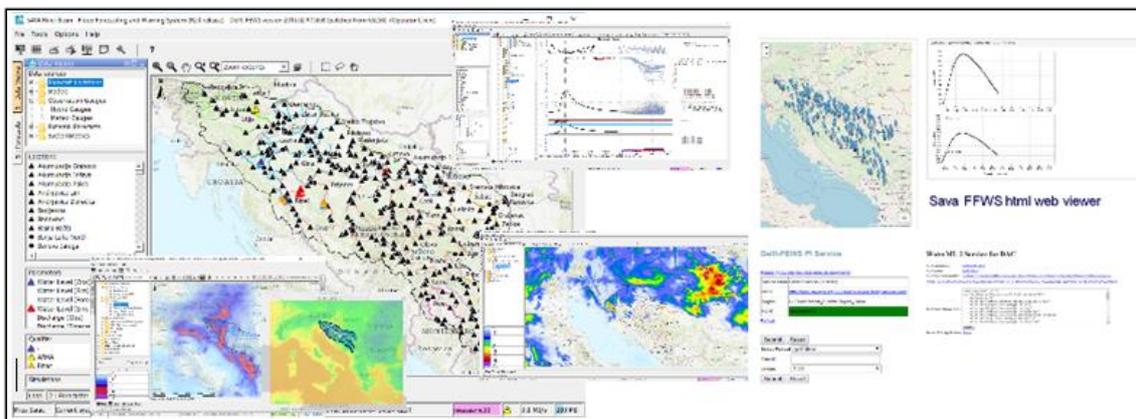


Figure 5. Sava FFWS in operational use

Memorandum of Understanding (MoU) on cooperation concerning regular functioning and maintenance of Sava FFWS has been prepared during the reporting period, and the procedure of its adoption was also finalized at the beginning of July 2020. The first and the most important step has thus been made in order to fulfil the obligations stemming from the Protocol on Flood Protection, pursuant to which the Parties are obliged to ensure regular maintenance of the system. The MoU regulates roles and responsibilities of the hosting organizations and users of the system, as well as those of third parties, and it also provides a possibility of establishing international bodies with specific roles in operation and maintenance of the system. All members of international teams for forecasting, support and development have been nominated, and the steering board held its first meeting in March 2021. Conditions for establishment of full coordination of system operation have thus been fulfilled.



Figure 6. Signing of the Sava FFWS MoU – Slovenia and Montenegro

One other activity, the importance of which exceeds flood forecasting as such, has also been successfully completed during the reporting period - upgrade of the Sava River Basin HEC-HMS hydrological model. The original model was developed in 2016 through technical assistance of the US Army Corps of Engineers, while model upgrade was done as a result of engagement of national experts (representatives of Sava FFWS users), with the coordination and technical support of the Secretariat.

The work was organized in the form of teleconferences, with three joint web meetings and several cycles of individual meetings with involved institutions, as well as through workshops organized for experts from Bosnia and Herzegovina in Sarajevo and Bijeljina.

In total, 199 meteorological stations and 134 hydrological stations are currently available in the new model, which is an increase by 125 meteorological stations and 41 hydrological stations compared to the basic model. Calibration was performed at 107 calibration points, which is an increase by 32 points compared to the initial model. The main results of the calibration process are as follows: (1) increase of meteorological inputs with wider coverage of spatial and time-related data for precipitation and air temperature; (2) corrections of meteorological snow melt model; (3) increased number of calibration points; (4) increased number of calibrated sub-basins, from initial 66 to 98; (5) performed simulations with long time series.

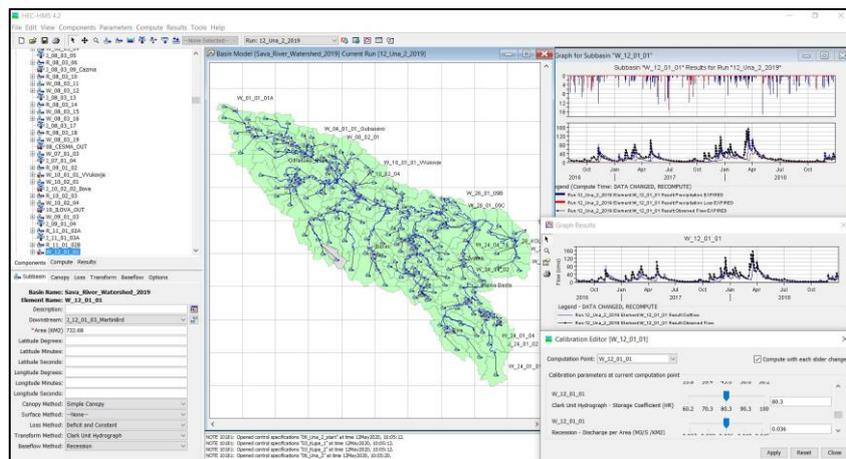


Figure 7. Sava HEC-HMS model

The new version of the Sava HEC-HMS model has already been integrated within the Sava FFWS test module, and the model will be put to use within operational Sava FFWS after the testing procedure, thus substantially contributing to the improvement of forecasting in the Sava River Basin.

As part of model enhancement activities, work on enhancement of hydraulic HEC-RAS model of the Sava River and its major tributaries is also ongoing internally in the Secretariat of the Sava Commission. Transformation of the model into the latest 6.0 software version has been performed, bringing substantial improvements and new capabilities, especially in the domain of 2D modelling.

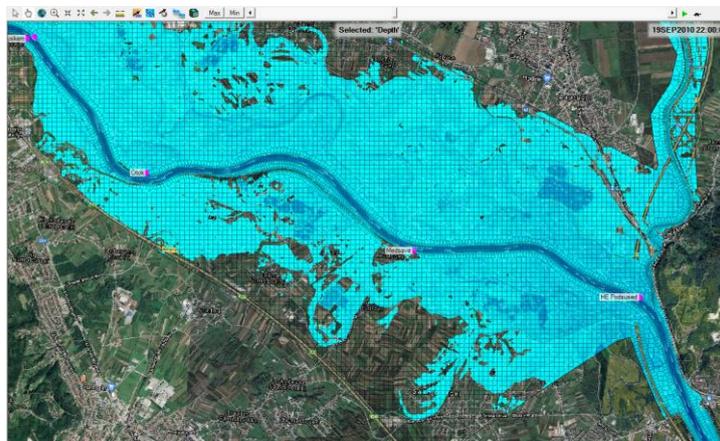


Figure 8. Sava HEC-RAS model

Further model enhancement and its potential integration into the Sava FFWS platform depends on efficient collection of additional data (see Chapter 2.2.), as well as on the availability of models created for some main Sava tributaries in the meantime.

1.3. Accident prevention and control

No transboundary pollution accidents were detected in the Sava River Basin in the reporting period.

The Parties to the FASRB use the Accident Emergency Warning System (AEWS), developed and maintained by the International Commission for protection of Danube River (ICPDR). The objectives of the AEWS are receiving, processing and dissemination of information of pollution, prompt dealing with the accidents and communication of information on emergencies. The AEWS is tested regularly twice a year, with the main objective to check the functionality of the system. Two tests were performed in 2020. The first test, which included a simulation of transboundary pollution, took place in May 2020. The main purpose of this test, announced in advance, was to check the participation of Principal International Alert Centers (PIACs) in disaster management in individual countries. The second unannounced test aimed at checking PIAC readiness took place on 5 November 2020. Both tests have shown that AEWS is functioning without major issues, despite the fact that PIACs in Bosnia and Herzegovina and Serbia are still not operational 24/7.

Implementation of the project *Water Contingency Management in the Sava River Basin (WACOM)*, funded from the *Danube Transnational Programme (DTP)*, commenced during the reporting period. The main purpose of the project is to decrease environmental risks connected with accidental pollution and floods, especially as regards risks with transboundary impact, as well as to improve cooperation between key stakeholders and to develop joint operational system for activation of accident management protocol in the Sava River Basin. The project is expected to contribute to the implementation of two protocols to the Framework Agreement in force - Protocol on Flood Protection and Protocol on Prevention of Pollution Caused by Navigation - as well as to some activities foreseen by the draft Protocol on Emergency Situations. The lead project partner is the University of Ljubljana, while other partners include institutions responsible for water management, flood risk management,

navigation, civil protection, and Sava Commission as an international institution. The project began in July 2020, and it will be implemented until December 2022. The project budget is 1.570 million EUR. As part of the project, in October 2020, an international conference was held with more than 70 participants from partner organizations, ministries, authorities, water agencies, hydrometeorological institutions, local government, companies and international organizations. The main purpose of the conference was to inform the key stakeholders and the general public about the project, in order to ensure their active participation in future activities, workshops and seminars planned over the next two years.

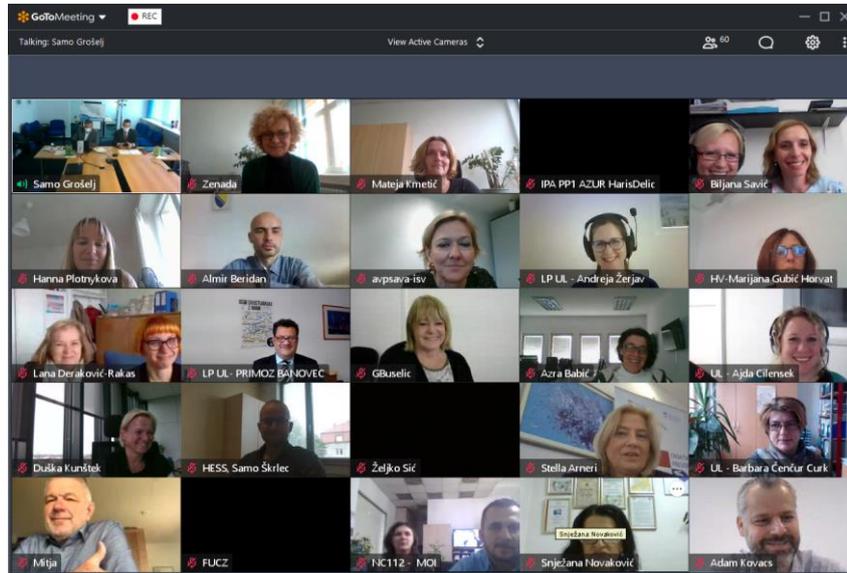


Figure 9: Some of the participants at international conference (16 October 2020)

Additional information concerning the project is available at the project's official website [Interreg Danube \(interreg-danube.eu\)](http://interreg-danube.eu) and in social networks [Facebook](#) and [Twitter](#).

2. Navigation

The ISRBC's work in the field of navigation in FY 2020, as has been the case so far, was primarily 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 has continued, with particular emphasis on improving the rules pertaining to certification of vessel crew members.

2.1. Rehabilitation and development of the Sava River waterway

Regarding the rehabilitation and development of the Sava River waterway, activities to address navigation problems on critical sectors, the so-called bottlenecks, continued in this reporting period.

In Serbia, works in the Šabac sector continued, in the sector rkm 99+100 to rkm 100+500. In the entire sector, the lowest depth across the full fairway width of 75m is 3m at the low navigable level. Serbia completed the preparation of Pre-Feasibility Study with preliminary design concerning fairway rehabilitation in the Drina Confluence sector, and adoption of this documentation by competent authorities is pending. In March 2020, project *FAIRway works! in the Rhine-Danube Corridor* was initiated, and it will, inter alia, include modernization of the fairway marking system in sections of the Sava River in Serbia by procuring state-of-the-art technological equipment. As part of the project *Preparing FAIRway 2 works in the Rhine-Danube Corridor*, which began in July 2020, analysis of needs will be performed and documentation prepared in order to upgrade and build mooring places for ships along the Sava River in Serbia. Preparation of documentation for execution of works aimed at improving infrastructure in Sremska Mitrovica port is also ongoing, as part of phase I of the *Sava and Drina Rivers Corridors Integrated Development Program*, which was under development in cooperation with the World Bank since 2017.

In Croatia, the project *Development of Environmental Impact Assessment Study and Design for the Action: Improvement of the Navigability Conditions of the Sava River from rkm 300 to rkm 329* (project Jaruge-Novigrad) has continued in 2020 as well. Aiming to involve important stakeholders from the very beginning of the project implementation, the ISRBC adopted Decision 7/19 establishing the Stakeholder Forum in 2019, and two Stakeholder Forum meetings were held during that year. Implementation of needed legal procedures in connection with environmental protection began in 2020 and is still ongoing. In addition, the Ministry of the Sea, Transport and Infrastructure of the Republic of Croatia requested and obtained the extension of project completion deadline until 31 December 2021, due to the impact of the COVID-19 pandemic. The Secretariat of the Sava Commission is in permanent contact with the competent ministry, in order to be able to organize the next Forum meeting immediately upon completion of the procedures mentioned above.



Figure 10: Groyne disposition for one-way navigation, sector „Jaruge –Novi Grad“

As part of the EU Operational Programme Competitiveness and Cohesion 2014-2020, Croatia began procurement of a waterway marking vessel and procurement of the most recent type of AtoNs; in addition, the project *Preparing FAIRway 2 works in the Rhine-Danube Corridor* mentioned above will include the preparation of needs assessment as regards upgrades/construction of mooring places for ships along the Sava River in Croatia.

Towards the end of 2020, grants were approved to Bosnia and Herzegovina for demining of the right bank of the Sava River by the Western Balkans Investment Framework (WBIF), in the amount exceeding 8 million EUR, and preparation for the initiation of demining is currently ongoing, in order to resolve this long-term problem.

2.2. Navigation safety and related technical standards

Improving navigation safety is one of the most important activities of ISRBC, and work on navigation safety and other technical standards has continued in this reporting period accordingly.

ISRBC continued to actively take part in the work of the European Code for Inland Waterways Expert Group (CEVNI EG), composed of representatives of the UNECE member states and river commissions. CEVNI EG has completed its work on the preparation of the 6th revised edition of the European Code for Inland Waterways (CEVNI 6), thus adopting proposals for further harmonization and modernization of navigation rules in Europe. The Commission also gave a substantial contribution to initiatives on autonomous shipping, with particular attention paid to the adaptation of related regulations (responsibility for ship damage, vessel identification rules, meeting, mixed navigation). Drafting of amendments to *Navigation Rules in the Sava River Basin* in line with changes introduced in CEVNI 6 is currently ongoing.

During the reporting period, the Sava Commission adopted the Decision on Amendments to the Navigation Rules in the Sava River Basin - Chapter 11: *Additional Local Requirements*, regarding the maximal dimensions of vessels and convoys on the sector Upper Sava. As a result of these amendments, permitted sizing of vessels and convoys has been adjusted to changes in fairway dimensions, taking into account in particular the appearance of passenger ships longer than 100 metres.

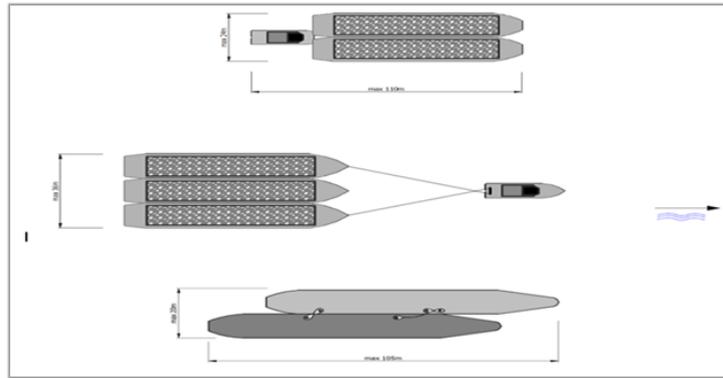


Figure 11. Convoy dimensions on the sector Upper Sava

ISRBC has also continued its participation in the work of the European Committee for drawing up standards in the field of inland navigation (CESNI) and its expert groups. 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. In 2020, CESNI prepared and adopted various standards related to technical requirements for vessels and personnel working on vessels in inland navigation (basic safety on vessel, practical exam for boatmasters, minimum number of crew members, suspension and revocation of certificates), with significant contribution of ISRBC.

In parallel, ISRBC completed its work on drafting of the Decision on the Rules for the Sava Navigation Personnel with the aim of modernizing and defining the requirements for the crew qualifications and harmonizing them with the CESNI standards. The Decision was adopted at the 56th Session of ISRBC in March 2020. In addition, in cooperation with competent bodies of the Parties, stretches of the fairway with specific risks have been agreed in accordance with the new Rules for the Sava Navigation Personnel.

In the framework of monitoring and support for operation of web applications pertaining to navigation safety (system for support to national bodies responsible for the navigation safety inspection and system for preparation of the Plan for Waterway Marking), integration of both applications into Sava GIS has been prepared with the assistance of the WACOM project.



Figure 12. Rafting on the Kupa River

Taking into account the need to regulate issues pertinent to the safety of recreational navigation on the common sectors of the Kupa River between Croatia and Slovenia, and the

readiness of the competent authorities of both states to harmonize the regime of navigation on the Kupa River, ISRBC has prepared the proposal of the *Recommendation on the Navigation Regime for Common Sectors on the Kupa River*, on the basis of which Croatia and Slovenia would harmonize their existing regulations and adopt new ones. The draft got positive opinions of the competent bodies from Croatia and Slovenia in terms of reaching of the Recommendation, with some proposals of amendments. Correction of the draft is ongoing, as regards the section pertaining to minimum water levels for safe navigation. Consultation with persons who have experience in navigation in this sector of the Kupa River is needed, and such consultation is made extraordinarily difficult due to impossibility of direct contacts as a result of the COVID-19 pandemic.

New amended version of the *Manual on the Sava River Navigation* has been prepared (marking of vessels, marking of waterway), and the printing of the Manual is expected in 2021. New version of the *Album of Bridges* has been amended with the inclusion of the bridges in Slovenia in the sector to Brežice and Svilaj bridge; pre-press preparation is ongoing, and the printed version is expected to be available in May 2021.

In 2020, the Republic of Serbia updated electronic navigational charts (ENC) of the Sava River in its sector and published the charts in printed form. The Sava Commission, with the assistance of the WACOM project, prepared ENC integration for the entirety of the waterway of the Sava River into Sava GIS.

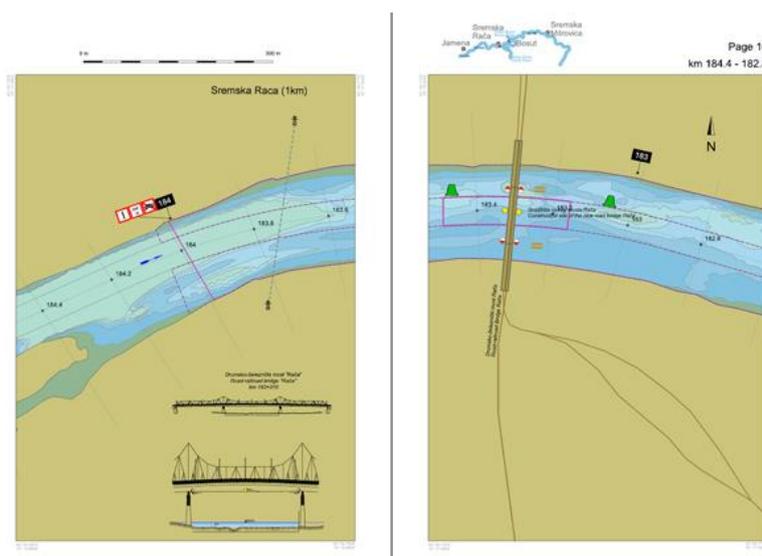


Figure 13. ENC in printed form

Using the legal capacity given by FASRB, ISRBC adopted the following binding decisions related to navigation safety in FY 2020:

Table 1. Overview of ISRBC decisions related to navigation in FY 2020

Decision	Subject	Adopted on
20/20	Adoption of amendments to Decision 4/16 on adoption of Navigation Rules in the Sava River Basin	30 September 2020
7/21	Adoption of the Plan for Waterway Marking and Maintenance on the Sava River and its Navigable Tributaries for the Year 2021	23 March 2021
8/21	Adoption of the Rules on Vessels Personnel in the Sava River Basin	23 March 2021
9/21	Delivery of Results of Bathymetric Surveys of the Sava River and its Navigable Tributaries to the Sava Commission	23 March 2021

It is important to point out that Decision 9/21 has a multi-sectoral character, and the intention is to continuously update the geometry of the existing HEC-RAS hydraulic model, in order to improve the accuracy of water level forecasts for low waters as well. As a consequence, this would enable the use of forecasts for various users of the Sava River waterway, but also for other purposes.

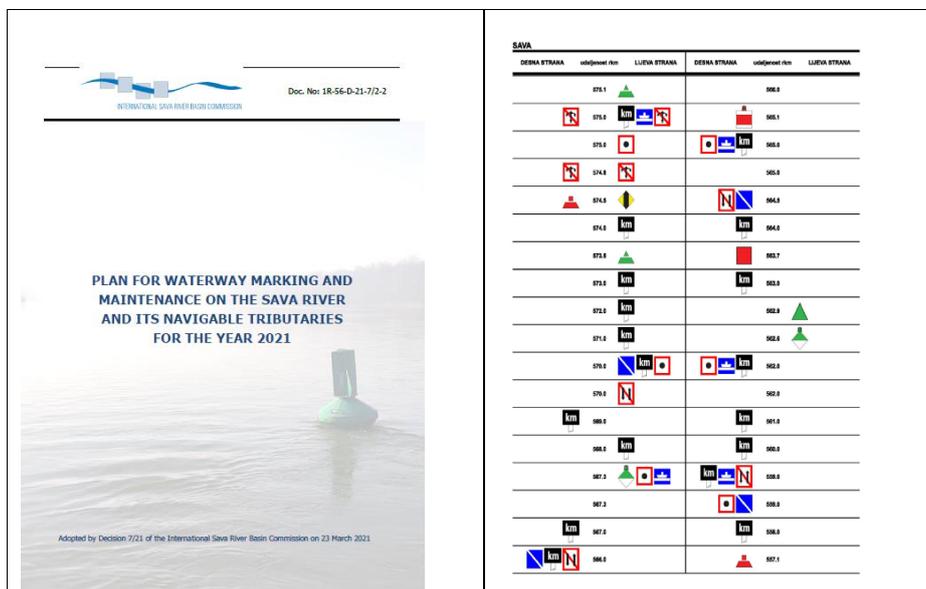


Figure 14. Plan for Waterway Marking and Maintenance on the Sava River and its Navigable Tributaries for the Year 2021

3. Data and information management

Exchange of information and data management were at the planned level during the reporting period, enabling relevant activities related to water management and flood protection at the level of the Sava River Basin. Activities of upgrade and development of new functionalities of the SavaGIS platform were initiated through project cooperation, in accordance with the Sava GIS strategy and implementation documents, while Sava HIS submodule enabled continuous collection and dissemination of hydrological and meteorological data, which represent a dataset necessary for full functionality of Sava FFWS.

Activities aimed at preparation of a new Sava Commission website entered the final phase, and official presentation of the new web solution is expected in mid-2021.

3.1. Geo-information issues

SavaGIS platform was fully and comprehensively operational in FY 2020. Sava GIS Geoportal, as the central part of the platform, had approximately 1900 single users, out of which 80 registered users with the capacity to deliver, edit and download defined datasets. Currently available datasets in the system are:

- 1st Sava RBMP datasets
- 2nd Sava RB Analysis data and metadata
- 2nd Sava RBMP datasets (working version; activities ongoing)
- 1st joint Sava PFRA report datasets
- 1st Sava FRMP datasets
- 2nd joint Sava PFRA report datasets (working version; activities ongoing)

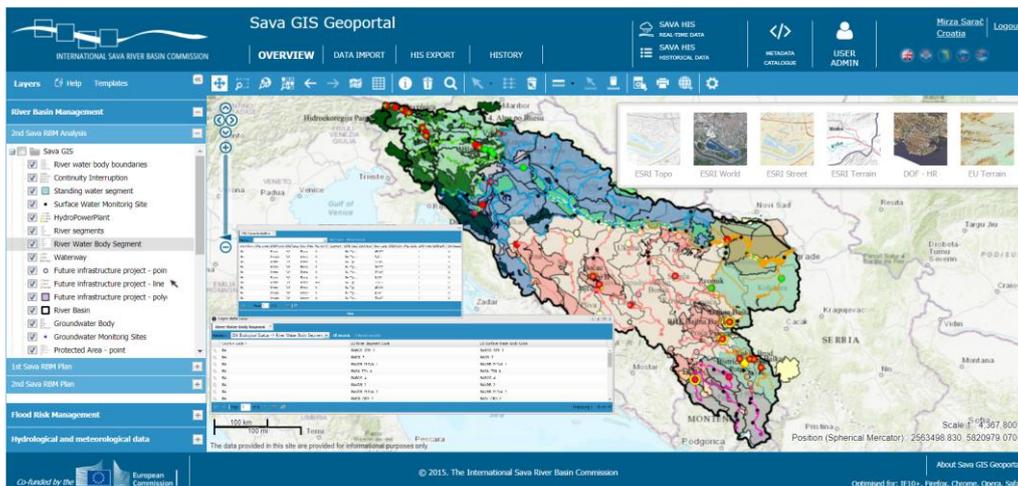


Figure 15. Sava GIS Geoportal (www.savagis.org)

Data gathering cycle for the purpose of the 2nd Sava RBMP development entered the final phase, and it will partly continue in FY 2021, as well as the collection of data for the update of the 2nd joint Sava PFRA report.

Within the SHELTER project, as part of activities aimed at improving the SavaGIS platform, a computer server has been procured and installed. Activities have commenced regarding the improvement of Sava GIS Geoportal functionality, with the aim of integrating data on cultural and historical heritage in floodplains of the Sava River Basin (for more information, see Chapter 1.1).

Activities on further improvements and development of new functionalities of the SavaGIS platform, including the development of navigation and accident prevention modules, as well as development of advanced reporting tools and decision support system, are in preliminary phase, and continuation of these activities is expected within the WACOM project in the course of FY 2021.

Due attention was paid to maintaining the system and to data security. The backup is scheduled to run every 4 months, while an additional backup is created manually after each data delivery cycle (e.g. within the river basin and 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 very efficient tool for collecting, storing, analyzing and reporting of hydrological and meteorological data on: precipitation, air temperature, snow depth, water level, discharge, water temperature, turbidity, as well as a number of statistical parameters.

The number of hydrological and meteorological stations in Sava HIS is continuously increasing, primarily due to the needs of Sava FFWS. Overview of the existing stations (number of real-time stations in brackets) in Sava HIS is presented in the following table.

Table 2. Overview of available stations in Sava HIS

Type of gauging station	BA	HR	ME	RS	SI	Total
Hydrological stations	108 (96)	131 (125)	11 (11)	28 (25)	32 (26)	310 (283)
Meteorological stations	75 (74)	49 (42)	5 (4)	12 (10)	76 (76)	217 (206)

The Sava HIS submodule for real-time data collection is continuously used by the Sava FFWS platform, through the replica installed at the primary host location of the system in ARSO (Ljubljana). It also functions without any problems.

According to available hydrological and meteorological data in Sava HIS, delivered by the data providers from countries, the Secretariat has prepared Hydrological Yearbooks for the years 2012, 2013, 2014, 2015 and 2016, available on the website of the Sava Commission. The Hydrological Yearbooks provide the overview of basic data on selected hydrological and meteorological stations in the Sava River basin, including related statistical analyses.

4. Cross - cutting and development issues

*Joint Plan of Actions for the Sava River Basin (JPA SRB)*², prepared by ISRBC in the spring of 2017, outlines the path towards sustainable development and growth in the region, with the aim to serve as a catalyst for further enhancement of the cooperation.

In the period following the drafting of JPA SRB, the World Bank involvement continued via the preparation of the *Sava and Drina Rivers Corridors Integrated Development Multiphase Approach Program (SDIP)*, with active participation and support of the Sava Commission. SDIP will be implemented through a two-phased programmatic approach, over a 10-year period. Phase I of SDIP includes sub-projects with high implementation readiness and relevance to the program objectives. The second phase will partially overlap with Phase 1 and is envisaged to implement sub-projects that will be prepared during Phase 1, to further strengthen regional integration and connectivity. The sub-projects will be implemented at national level and will have cumulative regional benefits.

Table 3. Proposed SDIP Scope and Implementing timeline

Focus Areas	Countries	Phase I	Phase II
		2020-2026	2023-2030
Flood Protection and Environmental Management	BiH, Serbia, Montenegro		
	BiH, Serbia		
Waterway Improvement	BiH	Demining of Sava River right bank	
	Croatia		
Enhancement of Port Facilities	BiH, Croatia		
	Serbia		
Regional Dialogue and Studies	BiH, Croatia, Montenegro, Serbia, and Slovenia		

LEGENDA

Provedba Faze I

Priprema Faze II

Provedba Faze II

In FY 2021, ISRBC continued intensive cooperation with the World Bank, primarily aimed at fulfilling the preconditions for approval of assistance for implementation of regional activities foreseen by SDIP. Component 4 / Regional Activities is a crucial component to strengthen strategic regional dialogue, joint planning and sustainable management of water resources in Sava and Drina River basins. This component will support policy dialogue and consultations, and it will ensure coordination of implementation of the entire Program. Furthermore, preparation of a range of plans and studies is planned, relevant for the entire basin, which will substantially contribute to the implementation of the Framework Agreement, and to the improvement of results of other current and relevant regional activities.

In order to ensure successful implementation, SDIP will be implemented by participating countries in a coordinated manner through two levels of coordination: at national and regional levels. At the regional level, the plan is to establish Regional Task Force (RTF), consisting of representatives of the ISRBC and country senior officials from key sectors such as water, transport, energy, and tourism. RTF will ensure a platform for facilitating the exchange of knowledge and experiences in implementation, ensuring stronger cross-border dialogue. In

² JPA SRB and Joint Statement of the representatives of the Parties to the FASRB and Montenegro supporting the JPA are available here: <https://www.savacommission.org/publication>

addition, new Regional Project Implementation Unit (RPIU), housed at ISRBC Secretariat, will be in charge of preparation and implementation of planned regional projects. This project component, in the value of approx. USD 8 million, is expected to be fully funded by GEF grant funds. In order to prepare for funding approval, all necessary preliminary steps have been made during the reporting period, including the preparation of documents necessary according to the Environmental and Social Standards of the World Bank. The Sava Commission thus prepared and published the draft of the Environmental and Social Commitment Plan (ESCP) for Component 4, made publicly available on March 16, 2021.

GEF approval, to be followed by the signing of the grant agreement with the ISRBC, is expected in the second half of FY 2021.

As regards other activities, one important item of note is continuation of regular monitoring and support by ISRBC to activities connected with assessment of the water-food-energy-ecosystems nexus, which began with assessment for the Sava River Basin (2014-2016), and continued with corresponding activities concerning the Drina River in several phases from 2016 until the present.

In the area of tourism development, most activities were focused on the development of the Sava Cycle Route. The main coordinator is the Slovenian Cycling Network. In the course of this reporting period, activities have been undertaken to modernize the route in view of the existing infrastructure. In order for the Sava Cycle Route to be integrated into EuroVelo 6, individual countries have established working groups that participated in the preparation of proposals. Call to include new cycling tours into EuroVelo 6 will open in September 2021.

5. Legal and financial issues

5.1. Legal issues

FASRB and its protocols provide a very effective basis for cooperation in the region, involving various sectors of the Parties, local authorities, and a number of other stakeholders. This improves collaboration, awareness, knowledge and capacity at cross-sectoral and multi-layered levels in each Party and in the regional context.

The current status regarding the protocols to FASRB is provided in the table below.

Table 4. 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	Belgrade, 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 2021	
Transboundary Impacts	Further development of the protocol currently not considered	

Besides the four above-mentioned protocols in force, the table provides information on the two protocols that were also subject to discussions during the reporting period.

Protocol on Emergency Situations 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 basin level, assessment of extraordinary impacts, emergency response and mutual assistance of the Parties. ISRBC distributed the updated Draft Protocol to the Parties in November 2020, and negotiations on final harmonization are expected by the end of 2021.

Protocol on Transboundary Impacts 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. The Draft Protocol was prepared at the time when all Parties were not members of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention). In the meantime, all Parties have ratified the Espoo Convention, on which the protocol mostly leaned, and expert consultations and roundtables were organized to discuss the actual added value of the protocol in light of the already existing mechanisms. A consensus on the need for this protocol has not been reached, and its further development is currently not under consideration.

Permanent legal support continued to be provided to the work of ISRBC and its working groups during the reporting period, and work also continued on preparation of various types of documents within the projects in which ISRBC participates (e.g. SHELTER and WACOM) and development of new international acts (e.g. Sava FFWS MoU).

5.2. Financial issues

Budget of ISRBC for FY 2020, in total amount of EUR 577,960.00, was adopted by Decision 4/20 at the 53rd Session of ISRBC (Zagreb, February 25-26, 2020). It consists of the regular annual contributions of the Parties, transfers from the Reserve Fund and of miscellaneous inflows.

The *General Fund* inflows and expenditures in FY 2020 are shown in Table 4 and Table 5, respectively.

Table 5. *General Fund income in FY 2020*

Source of Income		Income (EUR)
1	Mandatory contributions from the Parties	547,960.00
	Bosnia and Herzegovina	136,990.00 ¹
	Croatia	136,990.00 ²
	Serbia	136,990.00 ³
	Slovenia	136,990.00 ⁴
2	Transfer from the Reserve Fund	22,131.40⁵
3	Miscellaneous	19,347.51⁶
Total General Fund income		589,438.91

Note: ¹ The contribution was paid on May 7, 2020. ² The contribution was paid in two equal parts, on March 12 and March 27, 2020. ³ The contribution was paid on July 7, 2020. ⁴ The contribution was paid on August 26, 2020. ⁵ Transferred amount for covering unexpected expenditures. ⁶ A part of grant funds for implementation of project: EU HORIZON 2020- SHELTER

Table 6. *General Fund expenditures in FY 2020*

Budget Chapter		Expenditures ¹ (EUR)
1	Staff salaries and allowances	479,910.18
2	Current costs	17,223.50
3	Travel expenses	588.64
4	Operational costs	9,886.41
5	Equipment	4,377.20
Total General Fund expenditures		511,985.93²

Note: ¹ The amount of expenditures on March 31, 2021. ² In accordance with Financial Rules of ISRBC, the rest of the General Fund shall be allocated to the Reserve Fund.

In FY 2020 the opening balance of Special and Trust Fund amounted to EUR 85,876.89. Additional inflow to this Fund during the period April 1, 2020 - March 31, 2021 was EUR 79,745.24, for the implementation of the following project activities:

- *Sustainable Historic Environments holistic reconstruction through Technological Enhancement and community based Resilience – SHELTER (EU-HORIZON 2020);*
- *Regular functioning and maintenance of the Flood Forecasting and Warning System for the Sava River Basin - Sava FFWS (FASRB Parties and Montenegro).*

For the above-mentioned project activities, the total outflow of Special and Trust Fund during FY 2020 was EUR 31,000.99.

In line with Financial Rules of ISRBC, a regular audit of the financial management of ISRBC for FY 2019 has been performed, with a general conclusion that the financial management is correct and in accordance with the ISRBC's rules and regulations and the general accounting principles. ISRBC accepted the Report on Audit of the Financial Management of ISRBC in FY 2019 at the 56th Session (March 23-24, 2021).

6. Cooperation and stakeholder involvement

6.1. Cooperation with international, national and local institutions

Cooperation of ISRBC with other organizations and bodies continued during the reporting period, in a manner adjusted to the period of the COVID-19 pandemic.

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, all via video meetings. ISRBC also continued to participate in the work of the Steering Committee for the Priority Area 1a of the EU Danube Strategy and the Rhine-Danube Corridor Forum, 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.

Cooperation with ICPDR and DC 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 was ensured by means of participation at sessions, expert group meetings and other events organized by the partner commissions. ISRBC hosted the 11th follow-up meeting of the *Joint Statement on Guiding Principles on the Development of Inland Navigation and Environmental Protection in the Danube River Basin* (Joint Statement) in September 2020, held online, with participation of 63 representatives of state bodies, the EU, international organizations, NGOs and private companies.

Cooperation is being maintained with other navigation commissions (e.g. CCNR), and other river and lake protection commissions. ISRBC hosted the annual meeting of heads of European river commissions in charge of water management in August 2020, which was held via video link.

Fruitful cooperation continued with the *International Network of Basin Organizations (INBO)*, as well as with UNESCO, in particular through joint work on the SHELTER project.

Cooperation with UNECE has also 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 Drina Nexus II follow-up project, as described in Chapter 4.

Cooperation with regional international organizations (UNDP, REC, GWP-Med, GWP-CEE), international financial institutions (e.g. WB), the business sector and non-governmental organizations (WWF, EuroNatur, etc.) also continued. Finally, contacts have been maintained with the Diplomatic Corps in the Republic of Croatia.

On a basin level, in addition to national institutions responsible for the implementation of *FASRB*, 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, tourism 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.

Considering the significance of stakeholders' involvement within the framework of activities

of ISRBC, cooperation with relevant institutions, NGOs and local actors from the basin has continued throughout the reporting period, and active involvement of stakeholders is continuously ensured, above all, for institutions/organizations with observer status in ISRBC, through meetings of ISRBC and its expert groups.

6.2. Marking the Sava Day 2020 and involving young generation

Marking the Sava Day on June 1, representatives of the Sava Commission participated in two events organized in Slovenia and Croatia on the occasion.

The first event was organized by the Slovenian Environment Agency (ARSO), in cooperation with the Association of Slovenian Geographers and the City Museum of Krško in Krško (Slovenia). As part of the event, high water mark was placed next to the museum, aiming to raise awareness and educate the general public on floods as natural processes that require our adaptation. In addition to the organizers, the event included the representatives of the Ministry of the Environment and Spatial Planning of Slovenia, Municipality of Krško, firefighters and pupils of Krško Elementary School.



Figure 16. Marking the Sava Day in Krško (SI)

The second event was organized by the Zagreb Sports Gymnasium, in the form of virtual public forum as part of the project „Unknown River - Life of the Sava Upstream and Downstream of Zagreb“ funded by the European Union from the micro-grants scheme „Students' Actions Against Climate Change“. The Project aimed at activating young generations to recognize and accept the European Green Deal, in order to maintain the quality of life in a healthy and safe environment without pollution. The Sava Commission presented its activities regarding climate change, water protection and conservation of biodiversity, emphasizing the importance of international cooperation in resolving joint challenges in countries of the Sava River Basin. The public forum was broadcast live on Facebook site available to the general public.

Youth Parliament, scheduled to be organized as part of Sava Day celebrations on 29 and 30 May 2020 with the topic of protection of cultural heritage against floods, was first postponed for autumn 2020, and then definitively cancelled due to a new wave of the epidemic. The next Youth Parliament is planned for autumn 2021, with the same topic, in the format adjusted to current pandemic-related circumstances.

Annexes

ANNEX I. List of the ISRBC members and deputy members

Name and surname	Function	Institution
Bosnia and Herzegovina		
Igor Pejić	Member until 11 March 2021 Chairperson until 1 July 2020	Ministry of Communications and Transport of Bosnia and Herzegovina
Zoran Andrić	Member since 11 March 2021	Ministry of Communications and Transport of Bosnia and Herzegovina
Boško Kenjić	Deputy Member until 11 March 2021	Ministry of Foreign Trade and Economic Relations Bosnia and Herzegovina
Vanda Medić	Deputy Member since 11 March 2021	Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina
Republic of Croatia		
Duška Kunštek	Member Vice Chair until 1 July 2020 Chairperson since 1 July 2020	Ministry of the Sea, Transport and Infrastructure of Republic of Croatia
Elizabeta Kos	Deputy Member	Ministry of Economy and Sustainable Development of the Republic of Croatia
Republic of Serbia		
Nataša Milić	Member	Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia, Republic Water Directorate
Veljko Kovačević	Deputy Member	Ministry of Construction, Transport and Infrastructure of Republic of Serbia
Republic of Slovenia		
Mitja Bricelj	Member	Ministry for Environment and Spatial Planning of Republic of Slovenia
Mojca Deželak	Deputy Member since 12 January 2021	Ministry of Foreign Affairs of the Republic of Slovenia

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

	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 Srpska 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 Srpska 1, 78000 Banjaluka Tel: +387 51 339 404
6.	Federal Ministry of Transport and Communications	Braće Fejića bb, 88.000 Mostar Tel: +387 36 550 025
7.	Ministry of Spatial Planning, Civil Engineering and Ecology of the Republic of Srpska	Trg Republike Srpska 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 Economy and Sustainable Development 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
4.	Ministry of Environmental Protection of the Republic of Serbia	Omladinskih Brigada 1, 11070 Novi Beograd

	Institution	Contact details
		Tel: +381 11 3110 271
5.	Republic Hydro-meteorological Service of Serbia	Kneza Višeslava 66, 11000 Beograd Tel: +381 11 3050 864
6.	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	Dunavska 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 2020

Event	Date	Method / Venue	Organizer
SHELTER project ³ - 2nd Sava Open Lab Stakeholder Workshop	28 May 2020	Video link	ISRBC, UNESCO
Sava Day 2020	1 June 2020	Krško (SI)	Slovenia
42nd PEG RBM meeting	16 June 2020	Video link	ISRBC
54th Session of ISRBC	1 July 2020	Hybrid meeting	ISRBC
Initial meeting of WACOM project (kick-off)	20-21 July 2020	Video link	University of Ljubljana / ISRBC
Meeting of the Secretaries of European water commissions	28 August 2020	Video link	ISRBC
42nd PEG FP meeting	15 September 2020	Video link	ISRBC
11th meeting on the monitoring of implementation of the Joint Statement on Inland Navigation and Environmental Protection in the Danube River Basin	16-17 September 2020	Video link	ISRBC/ ICPDR and DC
55th Session of ISRBC	29 and 30 September 2020	Hybrid meeting	ISRBC
WACOM project - kick-off conference	16 October 2020	Video link	University of Ljubljana / ISRBC
21st PEG GIS meeting	21 October 2020	Video link	ISRBC
18th Ad hoc L EG meeting	30 October 2020	Video link	ISRBC
43rd PEG RBM meeting	26 November 2020	Video link	ISRBC
23rd PEG NAV meeting	28-29 November 2020	Video link	ISRBC
25th PEG APC meeting	1 December 2020	Video link	ISRBC
SHELTER project - Workshop on local solutions to protect cultural and historical heritage against floods in the Sava River Basin	15 December 2020	Video link	ISRBC, UNESCO
Strategic Meeting of ISRBC	22 December 2020	Video link	ISRBC
SHELTER project - 3rd Sava Open Lab Stakeholder Workshop	19 January 2021	Video link	ISRBC, UNESCO
Sava FFWS informative meeting with users	9 February 2021	Video link	ISRBC
ISRBC- ICPDR secretariats' joint meeting	16 February 2021	Video link	ISRBC
44th PEG RBM meeting	2 and 9 March 2021	Video link	ISRBC
43rd PEG FP meeting	3 March 2021	Video link	ISRBC
14th Ad hoc FIN EG meeting	17 March 2021	Video link	ISRBC
17th PEG HMI meeting	17 March 2021	Video link	ISRBC
22nd PEG GIS meeting	18 March 2021	Video link	ISRBC
1st meeting of the Sava FFWS Management Group	24 March 2021	Video link	ISRBC
56th Session of ISRBC	23 and 24 March 2021	Hybrid meeting	ISRBC
Drina Nexus Phase II -2nd meeting of WG for ecological flow	29 March 2021	Video link	ISRBC, UNECE

³ Only the key events are stated for projects

ANNEX IV. List of the FASRB-related projects implemented or ongoing in FY 2020

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	Active	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	Promoting the Sustainable Management of Natural Resources in Southeastern Europe, through the use of the Nexus approach -Nexus assessment of the Drina River Basin (Phase II)	Active	2020-2021	GWP-Med, UNECE	N/a	Austrian Development Agency (ADA)
3	Sustainable Historic Environments hoListic reconstruction through Technological Enhancement and community based Resilience - SHELTER	Active	Started in June 2019; Implementation period 4 years; Kick off meeting held on June 13-14, 2019; Three stakeholder workshops related to the Sava case study (open lab) held in total; Working Group established for monitoring project implementation, with representatives of competent institutions (cultural heritage management and flood management) from 5 Sava countries. Data collected on cultural assets (1210) in areas with potential flood risk. Planned updates of Sava GIS are ongoing, in order to integrate data. Preparatory activities for flood impact analysis concerning potentially threatened cultural assets are ongoing. ISRBC is involved in development of all other tasks at project level.	Tecnalia, ES/ISRBC as project partner	5,999,448.75 (ISRBC) 209,365.00)	H2020
4	Water contingency management plan for the Sava River Basin - WACOM	Active	WACOM project was approved within the 3rd call for project proposals of the Danube Transnational Program (DTP). The lead partner is the University of Ljubljana, while project partners include water management, navigation and civil protection entities from the Sava Countries and ISRBC.	University of Ljubljana/ISRBC as project partner	1,570,581.0 (ISRBC): 214,820.00).	DTP

No	Project title	Status	Remark on the status / Implementation period	Lead partner(s) / Consultant	Budget (k€)	Funding source
5	Outline of the Sediment Management Plan for the Sava River Basin	Active	<p>The project commenced on 1 July 2020, and it will be completed by 31 December 2022 (30 months). The initial conference was held online on 16 October 2020. Mapping of institutions and procedures connected with coordinated planning and emergency response has been performed.</p> <p>Four national workshops have been organized in BA, SI, HR and RS, via the web or in hybrid form. Development of joint tools for preparation for, and response to, emergencies is ongoing.</p> <p>ISRBC is responsible for communication activities, and it participates as project partner in all work packages.</p> <p>Agreement signed on 17 March 2021. The project is in initial implementation phase, with completion deadline until the end of 2021.</p> <p>Expected results:</p> <p>A/ Analysis of the existing status</p> <ul style="list-style-type: none"> - Analysis of sediment management practices in the Sava River Basin (Slovenia, Croatia, Bosnia and Herzegovina, Serbia), with a focus on existing data on sediment quantity and quality, - Analysis of the existing monitoring systems and proposal concerning improvements, - Analysis of measures undertaken by countries to control erosion, flash floods and other processes; measures to ensure and maintain water regime integrity; conditions for safe navigation; measures to protect wetland areas and retentions; measures to protect ecosystem biodiversity; measures to control sedimentation in reservoirs; etc. - Proposal concerning improvements of measures listed above <p>B/ Proposal of detailed work plan for the preparation of a comprehensive Sediment Management Plan for the Sava River Basin, with deadlines, method of drafting, needed resources and stakeholders.</p>	ISRBC	12.4	UNESCO Venice Office

No	Project title	Status	Remark on the status / Implementation period	Lead partner(s) / Consultant	Budget (k€)	Funding source
6	Rehabilitation of the Sava River Waterway on the Sector Jaruge - Novi Grad	Active	<p>Contract for preparation of the design documentation and EIA signed on 20 December 2018.</p> <p>Kick off meeting held on 04 Feb 2019.</p> <p>Based on the Decision 2/19 and Decision 7/19, ISRBC established Stakeholders Forum (SF) for development of Environmental Impact Assessment Study and Design for the Sava River from rkm 300 to rkm 329. The Members of the SF are members of the Committee for rehabilitation of navigation and representatives from the non-governmental sector, civil society and professional organizations and regional and local administration from the territory of the project execution from Bosnia and Herzegovina and the Republic of Croatia identified on the basis of the publicly announced Call for expression of interest for the membership in the SF. The first SF meeting was held on 22 May 2019, and the second meeting on 12 November 2019. Obtaining the required consents of competent Croatian authorities is currently ongoing. The third SF meeting is planned for autumn 2021, depending on the completion of current procedure and the situation concerning the pandemic. The new project completion deadline, approved by the EC, is 31 December 2021.</p>	<p>Ministry of Sea, Transport and Infrastructure RoC/ IGH d.o.o., Zagreb Hidrokonzalt d.o.o. Zagreb Elektroprojekt d.d., Zagreb</p>	648.8	EZ (CEF HR)

ANNEX V: List of external projects supported by ISRBC completed or ongoing in FY 2020

No	Project title	Status	Brief description	Budget (k€)	Funding source	Role of ISRBC
1	Danube River Basin Enhanced Flood Forecasting Cooperation - DAREFFORT	Ongoing June 2018 – May 2021	DAREFFORT project is a horizontal initiative for joint and sustainable implementation of flood risk mitigation measures at the level of the Danube River Basin, with particular focus on strengthening transnational water management and prevention of flood risk.	1,351	DTP	Associated strategic partner
2	Danube River Region Resilience Exchange network - DAREnet	Ongoing September 2017 – August 2022	DAREnet aims to enable Flood Management Practitioners in the Danube River Region to: connect and exchange with national and European stakeholders in a truly collaborative environment; identify and analyse relevant innovation gaps; translate the gaps into a joint innovation strategy to improve flood resilience.	3,500	EU H2020	Observer
3	Sediment-quality Information, Monitoring and Assessment System to support transnational cooperation for joint Danube Basin water management- SIMONA	Ongoing June 2018 - November 2021	SIMONA project will respond to the current demand for effective and comparable measurements and assessments of sediment quality in surface waters of the Danube region, by creating the “Sediment-quality Information, Monitoring and Assessment System”, ready for implementation in order to support transnational cooperation for joint management of Danube River Basin waters.	1,750	DTP	Associated strategic partner
4	Framework for improving water balance and nutrient mitigation by applying small water retention measures - FramWat	Implemented June 2017 - June 2020	FramWat project promotes the idea of using landscape features in order to help resolve ecological problems in water bodies in a sustainable manner.	1,611	Interreg Central Europe	Associated partner
5	Preserving Sava River Basin Habitats through Transnational Management of Invasive Alien Species - Sava TIES	Ongoing June 2018 - May 2021	The main objective of Sava TIES project is to decrease the fragmentation of habitats and to improve the connectivity of transnational ecological corridor of the Sava River Basin by developing intersectoral measures to monitor, control and eradicate invasive alien species in the network of protected areas in the Sava River Basin.	1,500	DTP	Associated project partner
6	Regenerating ecosystems with Nature-based solutions for hydro-meteorological risk reduction - RECONNECT	Ongoing September 2018 - August 2023	The objective of the RECONNECT project is to contribute to the European reference framework for Nature-Based Solutions (NBS) by showcasing, promoting and improving large NBSs, as well as by supporting a new culture of “land use planning”, bringing together risk mitigation and local and regional development goals in a sustainable manner.	14,200	EU H2020	Observer

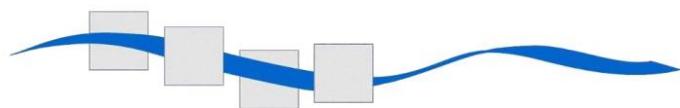
No	Project title	Status	Brief description	Budget (k€)	Funding source	Role of ISRBC
7	FAIRway works! in the Rhine Danube Corridor	Ongoing March 2020 - December 2023	<p>The project will additionally eliminate existing bottlenecks by upgrading locks, creating and upgrading mooring infrastructure, as well as by improving navigability through hydrological services:</p> <ul style="list-style-type: none"> • Upgrade of Iron Gate 2 (Serbia); • Upgrade of 3 public mooring sites (Upper Austria, Lower Austria and Vienna); • Procurement of two multifunctional marking vessels (Austria and Serbia), one geodetic vessel (Serbia) and 100 modern buoys with AIS modules for the Sava River. 	42, 576	CEF	Advisory Board
8	Preparation of FAIRway 2 works in the Rhine-Danube corridor	Ongoing July 2020 - April 2024	<p>The study is a joint project of Austria, Croatia and Serbia that will:</p> <ul style="list-style-type: none"> • provide a list of environmental and navigational characteristics of the joint Croatian-Serbian section of the Danube; coupled with depth analysis, this will help to identify potential future works, their options and potential next steps for future integrated river engineering projects; • specify further functionalities of transnational waterway management system (WAMOS); • develop improved method for stakeholder coordination; • prepare studies for needs assessment regarding commercial maritime transport in relation to upgrade/construction of mooring sites along the Danube and the Sava River for Austria, Croatia and Serbia; • provide foundations for future implementation within the foreseen FAIRway Danube 2 project 	3,292	CEF	Advisory Board
9	Competence Based Education and Training for Inland Navigation - COMPETING	Ongoing January 2019 - December 2021	<p>COMPETING is a three-year project within the Erasmus+ program, and its aim is to develop curricula and teaching materials, as well as quality assurance and quality control system (QA/QC), in order to ensure top level of quality as regards implementation of EU-wide IWT education and vocational training resilient to change.</p>	0,938	Program Erasmus+	Advisory Board

No	Project title	Status	Brief description	Budget (k€)	Funding source	Role of ISRBC
10	Integrating Danube Region into Smart & Sustainable Multi-modal & Intermodal Transport Chains - DIONYSUS	Ongoing July 2020 - December 2022	The project is focused on resolving key regional challenges in managing infrastructure and planning, by focusing on key measures needed to support the Danube transport and port infrastructure planning. It is founded upon the results of the DAPHNE project in developing port infrastructure and cooperation of the Danube port network.	3,603	DTP	Associated partner
11	Platform for the implementation of NAIADES - PLATINA 3	Ongoing January 2021 - June 2023	PLATINA 3 serves as a bridge towards future research, innovation and implementation needs within IWT in Europe. By defining the framework for future inland navigation in Europe, development path for inland navigation in the Danube region will be determined as well. Key experts and stakeholders are partners of the PLATINA 3 consortium, ensuring needed expertise and support to implementation: IWT sector and shipping companies, member states and river commissions, waterway administrations, educational and vocational training institutes, Waterborne Technology Platform (Sea Europe), workers, competence centers.	1,999	EU H2020	Advisory Board
12	Improving water quality in the Danube river and its tributaries by integrative floodplain management based on Ecosystem Services - IDES	Ongoing July 2020 - December 2022	The main objective of IDES is to improve water quality management along the Danube and its tributaries by applying integrative floodplain management (IDES tool), founded upon ecosystem services. The expected change is improved implementation of water quality management in the Danube region, by mitigating conflicts and promoting synergies among various social interests in floodplain areas, thus also determining sustainable, effective and integrative management options.	1581,3	DTP	Associated strategic partner
13	Tackling hazardous substances pollution in the Danube River Basin by Measuring, Modelling-based Management and Capacity building- Danube Hazard m3c	Ongoing July 2020 - December 2022	The objective of the project is to pave the way for permanent and effective transnational control and decrease of hazardous substances water pollution in the Danube River Basin. Increasing understanding of the status and harmonized institutional capacities, which are expected to result from project activities, will improve the manner in which hazardous substances pollution is resolved in the Danube River Basin Management Plan, in sub-basin management plans and national river basin management plans.	2597,5	DTP	Associated strategic partner

ANNEX V. Acronyms & Abbreviations

AEWS	Accident Emergency Warning System
AMI	Area of mutual interest (for flood protection)
APC	Accident Prevention and Control
ARSO	Slovenian Environment Agency
BA, BiH	Bosnia and Herzegovina
CESNI	European Committee for drawing up standards in inland navigation
CEVNI	European Code for Navigation
DC	Danube Commission
DTP	Danube Transnational Programme
EG	Expert Group
Espoo Convention	Convention on Environmental Impact Assessment in a Transboundary Context
EU	European Union
FASRB	Framework Agreement on the Sava River Basin
FFWS	Flood Forecasting and Warning System
FIN	Financial issues
FP	Flood prevention
FRM	Flood Risk Management
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-HMS	Hydrologic Engineering Center's Hydrologic Modeling System
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
ISRBC	International Sava River Basin Commission
JPA SRB	Joint Plan of Actions for the Sava River Basin
ME	Montenegro
NAV	Navigation
PEG	Permanent Expert Group
PIAC	Principal International Alert Center
RBM	River Basin Management

RIS	River Information Service
RS	Republic of Serbia
SDIP	Sava and Drina Rivers Corridors Integrated Development Program
SHELTER	Sustainable Historic Environments hoListic reconstruction through Technological Enhancement and community based Resilience
SI	Republic of Slovenia
SRBA	Sava River Basin Analysis
SWMI	Significant Water Management Issues
UNDP	United Nation Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
WACOM	Water Contingency Management in the Sava River Basin
WBIF	Western Balkans Investment Framework
WWF	World Wide Fund for Nature



INTERNATIONAL SAVA RIVER BASIN COMMISSION