

INTERNATIONAL SAVA RIVER BASIN COMMISSION

ANNUAL REPORT
on the work and activities of the
International Sava River Basin Commission
for the period April 1, 2021 - March 31, 2022

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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 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, 2021 - March 31, 2022 (Annual Report¹)* has been prepared accordingly.

The Sava Commission and its Secretariat as a permanent body continued to adjust their work and activities to the pandemic conditions. The experiences from the previous period were very useful and it can be said that the main goals in FY 2021 have been met. Proper operations of the Sava Commission and all its expert bodies under such circumstances has been secured. Despite all the difficulties confronted so far, this experience will nonetheless represent an additional value after the pandemic, and contribute to even more efficient work, while not neglecting the social component.

In the reporting period three sessions of the Sava Commission were held, all in the so-called hybrid format. Other important events include the celebration of Sava Day 2021, the organizing of the Sava Youth Parliament and the meeting of the Heads of the European Water Commissions hosted by the Sava Commission. Details of these and other events are given in this Report.

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: finalization of the 2nd River Basin Management Plan for the Sava River Basin (Sava RBMP); further advances in flood risk management and sediment-related issues, continuation of the activities towards rehabilitation and development of the navigation on the Sava River waterway together with the work on the related safety standards, as well as on the further development of linked integrated systems. Substantial efforts and resources have been invested in the implementation of the ongoing projects as well as in the preparation of activities planned for the following years, with a special attention given to finalizing of preparation of the regional component of the Sava and Drina Rivers Corridors Integrated Development Program (SDIP).

More details are provided in Chapters 1 to 6 of this Report; in addition, useful information is also given in the annexes.

¹ *Annual report* corresponds to the Financial Year (FY) of ISRBC which covers period from April 1 of the current year to March 31 of the following year

1. Integrated water management

Aiming at basin wide integrated water management, and internationally coordinated planning and development of water resources, ISRBC was in the reporting period focused on finalisation activities of the 2nd Sava RBMP, continuation of activities in flood risk management and activities addressing sediment-related issues, as well as on the further development of linked integrated systems.

1.1. River basin management

Development of the joint or coordinated Sava RBMP, required by the Article 12 of the FASRB, represents the most important prerequisite in reaching one of its ultimate goals – the establishment of sustainable water management in the Sava River Basin.

The process of development of the 2nd Sava RBMP, which started in 2015 and resumed with all the steps required by the Water Framework Directive, resulted in FY 2021 by preparation of the final draft, ready for the public consultation process. The draft plan represents the basis for basin wide integrated, technically, environmentally, and economically sound and sustainable water management. It provides an overview of the current status of all waters, together with the Programme of measures to be implemented to facilitate the steps towards achievement of the commonly agreed environmental objectives.

ISRBC accepted the final draft of the 2nd Sava RBMP on its 58th Session held in October 2022 and, at the same session, approved launching a four-months long public consultation process. The process started on November 23, 2021 and finished on March 23, 2022. The internet-based public consultation was enabled through the official website of ISRBC, where the draft 2nd Sava RBMP was available together with the specially developed questionnaire to facilitate commenting by all interested parties.

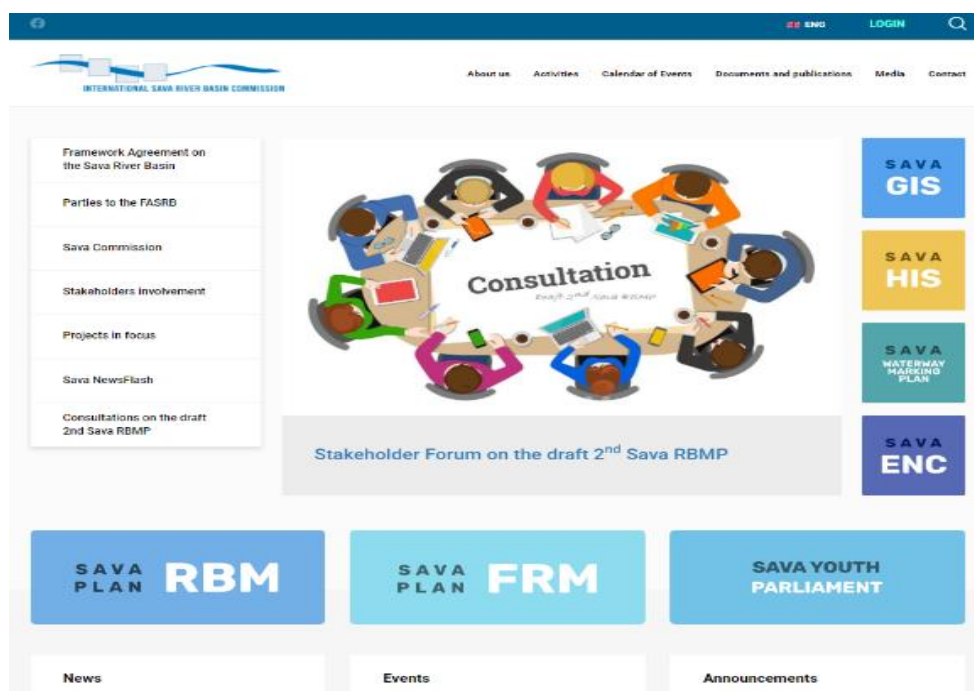


Figure 1: Announcement of the internet-based public consultation on the draft 2nd Sava RBMP

In addition, aiming to promote the public consultation campaign, ISRBC organised the Sava Stakeholder Forum on December 17, 2021, as an online event to discuss the draft plan. The event gathered more than 80 registered participants: representatives of the ministries, national authorities, public companies, NGOs, academia, scientific institutes, private sectors, and international organisations. After finalisation of the public consultation phase, the draft 2nd Sava RBMP was revised in accordance with the comments received.

The next step in the approval process is the distribution of the 2nd Sava RBMP to the Parties to the FASRB (and Montenegro) as an official proposal of the Sava Commission (in English and all official languages) in order to conduct their internal approval procedures.

The final approval of the 2nd Sava RBMP is expected in autumn 2022, on the 9th Meeting of the Parties.

The Sava Commission has coordinated the development of the *Outline of the Sediment Management Plan for the Sava River Basin*. This *Outline* is an important step towards the development of the Sediment Management Plan for the Sava River Basin, required by Protocol on Sediment Management to the FASRB.



Outline of the Sediment Management Plan for the Sava River Basin

Report on Sediment Management in the Sava River Basin

November 2021

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Figure 2: Cover page and the contents of Outline

The main outcomes of the *Outline* include: an overview of existing sediment management practices in the basin; information on sediment monitoring systems and data on sediment quantity and quality; proposal of the improvements of the monitoring system as well as a proposal of further steps leading to development of a full-fledged Sediment Management Plan. The *Outline*², in its annexes, also provides a detailed overview of the status of sediment management practices in SI, HR, BA, and RS. The development of the report was supported by the UNESCO Office in Venice.

Pursuant to Protocol on Sediment Management, the Parties are obliged to deliver information on sediment dredging executed in the previous year and data on planned dredging during the

² <https://www.savacommission.org/documents-and-publications/water-management-1957/outline-on-sediment-management-plan-in-the-sava-river-basin/10538>

current year. Based on the delivered data, the Sava Commission prepared reports on executed sediment dredging in 2020 and planned dredging in 2021 and 2022. The reports have been delivered to competent institutions of the Parties. According to the collected data, more than 1.4 million m³ was dredged in 2020. Percentage of executed sediment dredging per river in 2020 is provided in the following Figure:

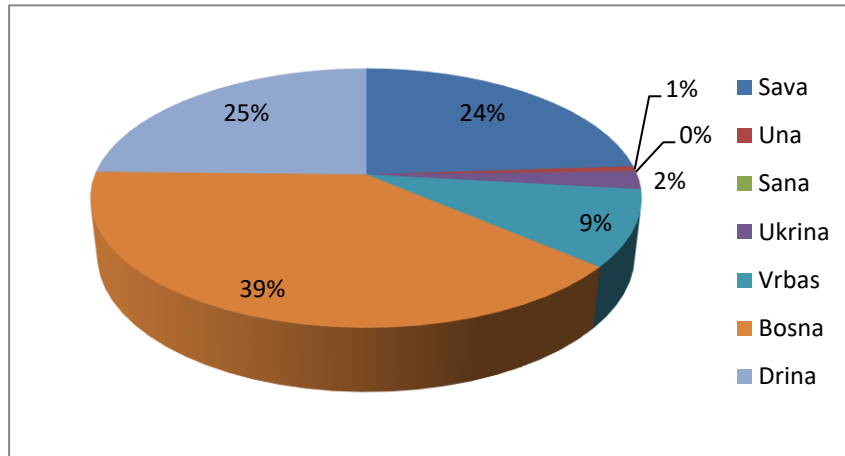


Figure 3. Percentage of executing sediment dredging per river in 2020

1.2. Flood management

Preparation of the *Flood Risk Management Plan in the Sava River Basin (Sava FRMP)* represents the most important task in reaching one of the ultimate goals of FASRB – undertaking of measures to prevent or limit hazards, and reduce and eliminate adverse consequences from floods in the Sava River Basin. Following the approval of the first Sava FRMP on the 8th Meeting of the Parties to the FASRB (Sarajevo, October 24, 2019), activities of the second flood risk management planning cycle started in 2020 and continued throughout FY 2021.

Preparation of the updated report on *Preliminary Flood Risk Assessment in the Sava River Basin (Sava PFRA)* is under finalisation. During the assessment a particular attention is paid to issues of flood risk in *Areas of Mutual Interest for flood protection (AMI)* in the Sava River Basin identified in the first plan. These areas have been revised, in line with analyses of *Areas of Potential Significant Flood Risk (APSFR)* conducted in the Parties.

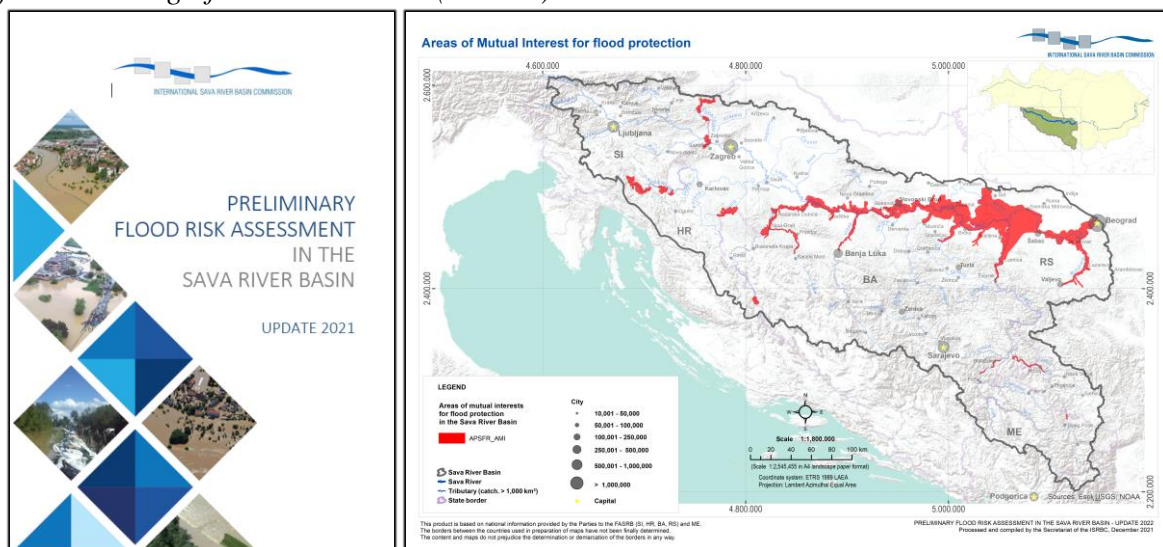


Figure 4. Cover page of the Sava PFRA update 2021 and map of the updated AMIs (draft)

Particular attention is paid to impacts of floods on cultural and historical heritage, which is a

topic analysed through the ongoing project *Sustainable Historic Environments hoListic reconstruction through Technological Enhancement and community based Resilience* (SHELTER: <https://shelter-project.com/>). SHELTER includes the Sava River Basin as one of five case studies (so-called Open Lab areas), jointly coordinated by UNESCO and ISRBC. Data on cultural and historical heritage located in floodprone areas have already been collected and integrated into the Sava GIS, while a flood impact analyses on the identified heritage sites is planned.

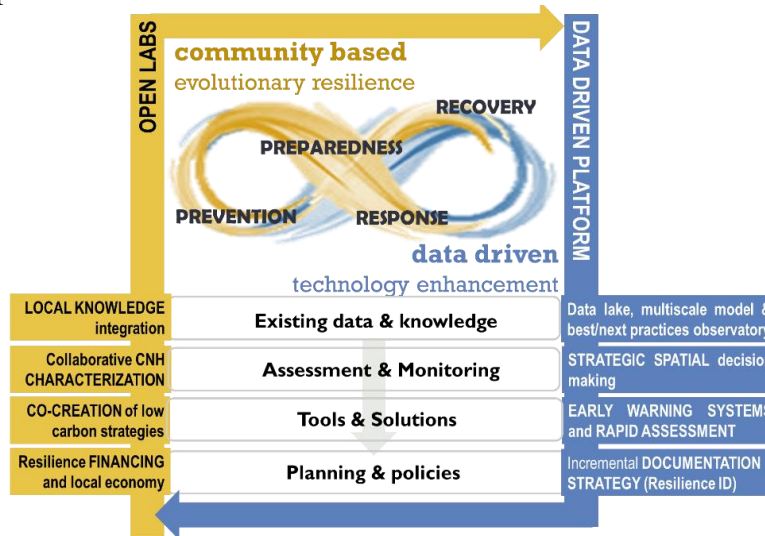


Figure 5. Shelter's Operational Knowledge Framework

The project has ensured the networking of relevant sectors (cultural and historical heritage, water / floods and emergency management), as well as the continuous exchange of knowledge and best practices within the Sava Open Lab and between all project case studies..The project will continue until May 2023, and it will substantially contribute to understanding of direct and indirect effects of flood hazards on cultural and historical heritage.

The *Flood Forecasting and Warning System in the Sava River Basin (Sava FFWS)*, is regularly used by competent national organisations (10 institutions from 5 countries responsible for flood forecasting). At the same time ISRBC continuously monitors its functionality and daily logins. In FY 2021, Sava FFWS has been upgraded to the newest system software version (Delft-FEWS 2021.01). The upgrade also included all necessary interventions on the servers' and database software. The upgrade is finalized by updating the documentation: the user manual and technical reference documents and by the knowledge transfer through the international exercise held in February 2022.

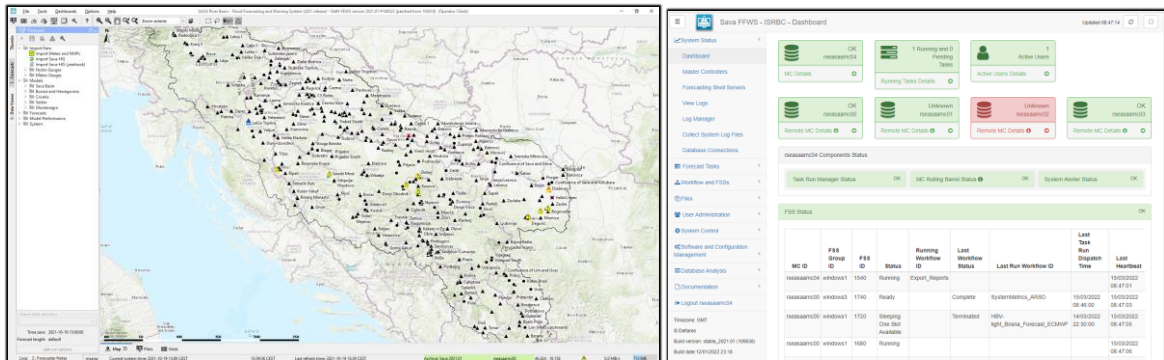


Figure 6. Sava FFWS Operator Client and Administration Interface

All international bodies required by *Memorandum of Understanding on cooperation concerning regular functioning and maintenance of Sava FFWS* have been established. Through their work, coordinated by ISRBC, the first report on the Sava FFWS functioning (for

the period July 1, 2020 – December 31, 2021), has been prepared. The report, beside an evaluation of the Sava FFWS functioning, includes the assessment of costs of all organizations included in the its work.

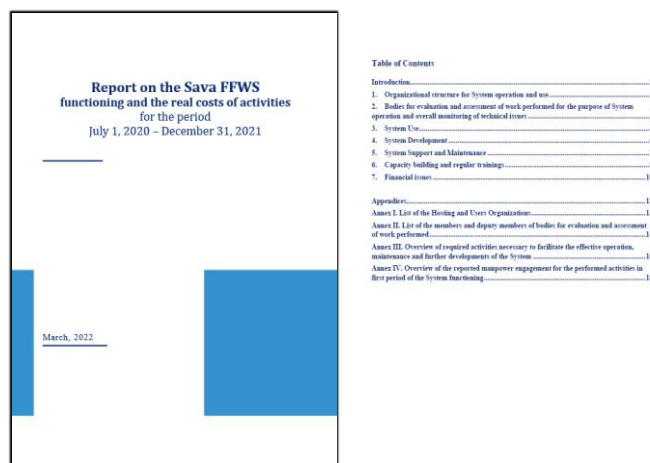


Figure 7. Cover page of the report on the Sava FFWS functioning

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 ICPDR's Accident Emergency Warning System (AEWS). The objectives of the AEWS are receiving, processing and dissemination of information on pollution, prompt dealing with the accidents and communication of information on emergencies. The AEWS functioning was tested two times in 2021, in April and in September. The tests showed that the AEWS works as expected. The reactivity and connectivity to the server was very smooth throughout the test and all participating Principal International Alert Centers (PIACs) were able to perform their tasks, 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)* commenced in July 2020. The budget of the project is 1,570,810.00 EUR and it is co-funded from the *Danube Transnational Programme (DTP)*. The main objective of the project is the reduction of environmental risks related to accidental pollution and floods. The project is focused to implementation of the three protocols (Emergency Situations, Prevention of Pollution Caused by Navigation and Flood Protection). The lead project partner is the University of Ljubljana, while other partners are institutions responsible for water management, flood risk management, navigation, civil protection, and Sava Commission as an international institution.

After mapping the institutions and procedures related to coordinated planning and response to accident pollution and floods four national workshops were organised in May/June 2021 online aiming at the presentation of the current status of the contingency management in the Sava riparian countries and the possibilities and benefits of using the Incident Command System (ICS) with particular emphasis on the elements of ICS 207 (incident organisation chart), ICS 209 (incident status summary), and the IAP (Incident Action Plan).

In September 2021 three regional workshops were held to introduce the anticipated approach in the development of the table-top exercise – simulation of accidental pollution due to an oil-freight train accident in Zidani most (SI), a sudden spill of petroleum products from a vessel and floods in Slavonski Brod (HR) and accidental pollution in the Zenica industrial area and flood in the confluence of the Sava, Drina, and Kolubara rivers. The workshop participants

discussed the roles of individual institutions, the roles of different systems, the reactions of the states, and the limitations and risks for the successful implementation of the planned exercise.

Due to the COVID-19 crisis all these workshops were organised online or in hybrid format. The information on the workshops were also covered by public media (i.e. newspapers and radio).



Figure 8: Participants at national and regional workshops in May and September 2021

Regarding the development of joint preparedness and response toolbox the modelling component for the oil slick propagation have been developed and the suitable framework for the exchange of information and coordination of identified institutions in the transnational context have been identified. The toolbox will be presented at the table-top exercises. The Sava Commission is responsible partner for official communication of the WACOM project. In this regard the three newsletters have been posted at the website and sent to the target groups aiming to provide information on project implementation. Articles on the project have also been published in the Sava NewsFlash- official bulletin of the Sava Commission and in Hrvatska Vodoprivreda - official bulletin of Croatian Waters.



Figure 9: Media coverage of the WACOM project

The project was also presented on different international events (e.g. Danube strategy meetings, conferences and meetings of permanent expert groups and sessions of the Sava Commission). Additional information concerning the project is available at the project's official website [Interreg Danube \(interreg-danube.eu\)](https://www.interreg-danube.eu)³ and in social networks [Facebook](https://www.facebook.com/WACOMSavaRiverBasin)⁴ and [Twitter](https://twitter.com/WacomSrb)⁵.

³ <https://www.interreg-danube.eu/approved-projects/wacom>

⁴ <https://www.facebook.com/WACOMSavaRiverBasin>

⁵ <https://twitter.com/WacomSrb>

2. Navigation

The ISRBC's work in the field of navigation in FY 2021, as has been the case so far, was primarily focused on the continuation of the activities towards rehabilitation and development of the navigation and transport on the Sava River waterway. Rehabilitation and development of the Sava River waterway

2.1. Rehabilitation and development of the Sava River waterway

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

In Serbia, dredging works at the sector Klenak, from rkm 104+000 to rkm 107+500, were finished in June 2021, with a total transported and disposed amount of 102,500 m³ of dredged material from the fairway. As for the remaining two critical sectors, Sremska Mitrovica and the Drina River mouth, the first one is included in the project of expanding the capacity of the port of Sremska Mitrovica and will be financed through SDIP. As far as the Drina mouth sector is concerned, the preparation of a preliminary feasibility study with a general design was completed. Since the part of the planned works will be executed on the territory of BiH, as well as Serbia planned to finance both technical documentation and works, it is necessary to regulate all required procedures at the bilateral level with the utilisation of already existing experiences from the agreements concluded between Croatia and Bosnia and Herzegovina. Works on the Drina mouth sector will be financed through the European Investment Bank (EIB) in the amount of 50%, while for the remaining 50% of the funds, Serbia has applied for a grant from the Western Balkans Investment Framework (WBIF).

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-Novi Grad) has continued in 2021 as well. Among several considered variants, the variant with one-way navigation with declinating groynes was proposed as the optimal solution, although the initial requirement considered the class IV waterway with two-way navigation. Such a solution will apply eco-engineering approach in line with the PLATINA manual. Moreover, the application of declinating groynes will reduce the impact on the environment, particularly in terms of sedimentation. At the 3rd Stakeholders Forum meeting, the forum members expressed satisfaction with the manner of project implementation and detailed multidisciplinary analyses that confirmed the sustainability of the adopted project solution. Finalization of the project documentation is expected in FY 2022.

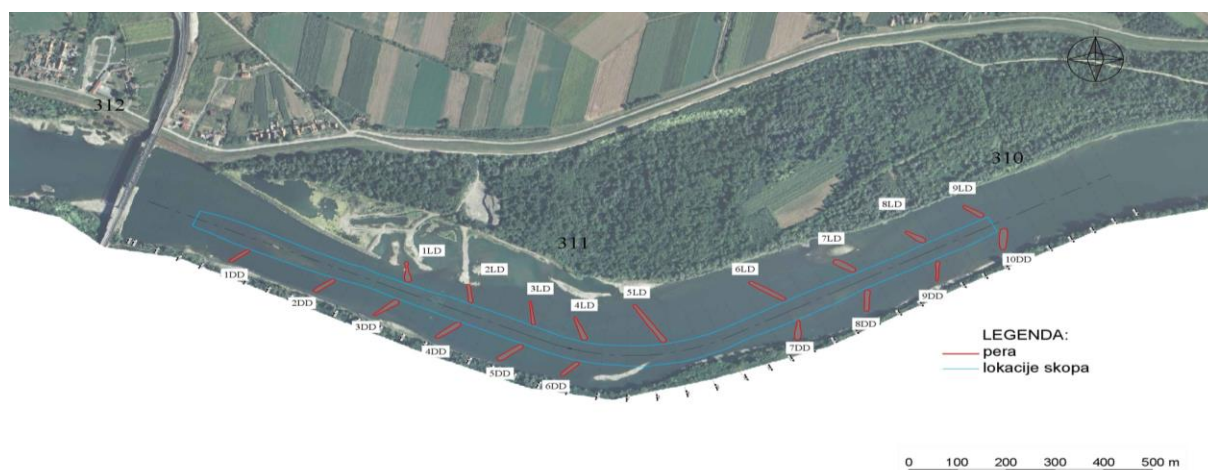


Figure 10: Groyne disposition for one-way navigation, sector „Jaruge –Novi Grad“

Of the other works, construction of two vertical quays of 107 and 122 m in length, connected to the existing vertical quay (total length of 370m) was completed in the port of Slavonski Brod, while the construction of a management and logistics area for a 1,400 m² container terminal is under way.

In Bosnia and Herzegovina, one of the most difficult problems - the presence of mines and UXO on the right bank of the Sava River, is about to be solved. The grant for demining in the amount of 8.16 M € was approved at the 23rd session of the WBIF Steering Committee in December 2021. Funds are expected to become effective by completing administrative procedures between WBIF, World Bank and EBRD. The deadline for implementing the demining project is 2 years after the start of work. Implementation of this project is the essential prerequisite for further implementation of the activities related to rehabilitation of navigation on the Sava River. In addition, within the first phase of the SDIP, the preparation of project documentation for the port of Gradiška is planned. At the same time, certain activities were initiated in order to ensure the financing of works on the BiH side of the Jaruge - Novi Grad sector in the second phase of the implementation of the SDIP. Accordingly, that sector should be given a priority in demining.

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.

As regard to the activities on the European level ISRBC continued to actively contribute to the work of international bodies and related projects.

ISRBC took 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 revised edition of the European Code for Inland Waterways (CEVNI 6), thus adopting proposals for further harmonisation and modernisation of navigation rules in Europe. ISRBC also contributed 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 underway.

ISRBC has also continued its active 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 to increase navigation safety and environmental protection in the context of inland navigation transport, thus promoting employment in inland navigation and rendering the sector more attractive while facilitating transport operations and promoting international trade.

ISRBC as an observer, participates in the EU-funded PLATINA3 project which started in January 2021. The project's main objective is to provide the knowledge base for implementing the EU Green Deal, given further development of the European Commission's IWT action programme (NAIADES) towards 2030. In addition, the platform will be a catalyst for awareness, stakeholder engagement and uptake of outcomes from related national and European projects and initiatives. More details on the project is provided in Annex V.

Integration of the two web applications in use (the system for support to national bodies responsible for the navigation safety inspection and the system for preparation of the Plan for Waterway Marking), into Sava GIS as well as the integration of the electronic navigational charts (ENC) for the whole Sava River waterway is underway within the WACOM project. Moreover, the navigation module of the Sava GIS will be developed through the same project. These activities will be finalized in FY 2022.

A new and amended version of the *Manual on the Sava River Navigation* was prepared (including marking of vessels, waterway marking, etc.), with the digital edition of the Manual expected in 2022.

The new version of the *Album of Bridges* was amended with the inclusion of the bridges in Slovenia up to the dam in Brežice along with the new Svilaj bridge. The Album was published in July 2021.



Figure 11. Cover page of the new edition of Album of bridges

As regards the publishing of statistical data on transshipment and fairway, the basic information regarding the collection, statistical processing, and analysis of data about goods and passenger transport in the Sava River Basin for 2021 has been prepared. It will be published on the ISRBC website in the first quarter of FY 2022.

Using the legal capacity given by FASRB, ISRBC adopted the following binding decisions related to navigation safety in FY 2021:

Table 1. Overview of ISRBC decisions related to navigation in FY 2021

Decision No.	Subject	Adopted on
2/22	Adoption of the Plan for Waterway Marking and Maintenance on the Sava River and its Navigable Tributaries for the Year 2022	March 15, 2022
3/22	Amendments to the Decision 16/14 on the Rules for definition of winter ports and winter shelters in the Sava River Basin	March 15, 2022

3. Data and information management

Already established channels of data and information exchange in the frame of ISRBC (i.e. Sava GIS and HIS) have enabled a smooth implementation of the related activities at the Sava River Basin level. Activities of upgrade of Sava GIS functionalities which were initiated in FY 2020, continued in the reporting period with an emphasis on the development of new functionalities related to navigation and APC. Additionally, the new web site of ISRBC was put in function.

3.1. Geo-information issues

Sava GIS platform as a whole was completely operational in FY 2021. Sava GIS Geoportal, the central part of the platform, has 81 users (Secretariat - 7, expert groups - 54, external users and projects – 20) currently registered with the management roles (data download, upload, editing). The Geoportal statistically numbered approx. 1700 unique users, continuously during the reporting period. Currently available datasets in the system are:

- 1st Sava RBMP datasets
- 2nd Sava RB Analysis datasets
- 2nd Sava RBMP datasets
- 1st joint Sava PFRA report datasets
- 1st Sava FRMP datasets
- 2nd Sava PFRA report datasets
- 2nd Sava FRMP datasets (working versions, still in progress).

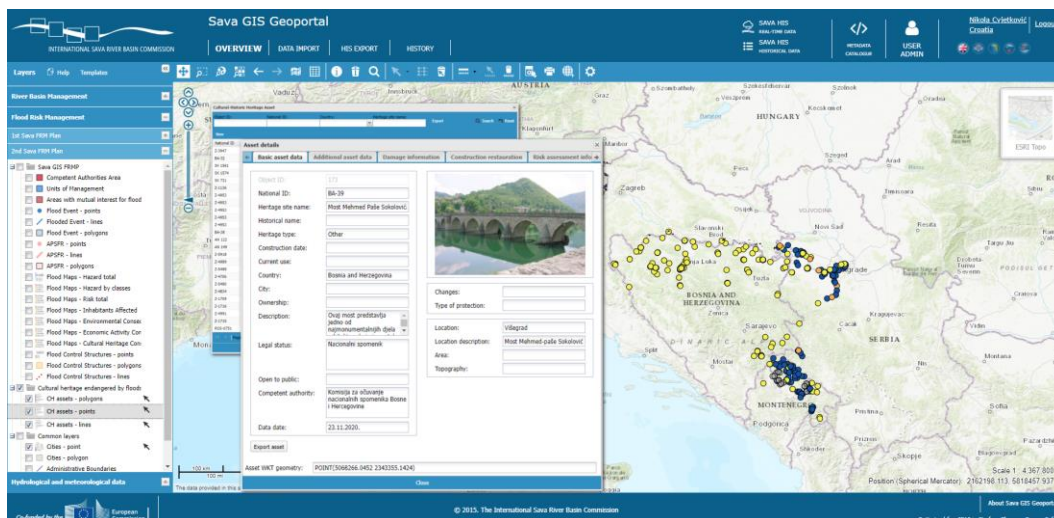


Figure 14. Sava GIS Geoportal (www.savagis.org)

The development of a new data theme on the cultural-historical heritage (CHH) in the Sava flood-prone areas (part of the Sava GIS FRM module) was completed as part of the “Improvement of the SavaGIS Geoportal functionalities” activities, within the SHELTER project. (for more information see Chapter 1.2).

The development of the Navigation (NAV) and Accident Prevention and Control (APC) modules on Sava GIS platform is underway within the WACOM project and continuation of these activities is expected in the course of FY 2022. NAV and APC modules will provide the necessary functionalities for navigation and water pollution information exchange and dissemination in the Sava River Basin.

Update of the SavaGIS data import manuals (part related to newly developed CHH data theme) has also been finalized as part of the SHELTER project activities. River network coding methods (stream ordering) were demonstrated within the "Topological analysis of Sava River Basin drainage network using GRASS GIS" overview. Continuation of the activities on the development of a basin wide methodology for the river network coding is planned in the coming period.

Data backup and system maintenance procedures are scheduled to run automatically every month, 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 (www.savahis.org) represents an efficient tool for collecting, storing, exchange and reporting of hydrological and meteorological data on: precipitation, air temperature, snow depth, water level, discharge, water temperature, turbidity, including a number of statistical parameters. Overview of the available stations in Sava HIS is presented in the following table. Number of stations with data in near real-time is in brackets.

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)

Based on the hydrological and meteorological data in Sava HIS, delivered by the data providers from the countries, the Secretariat has prepared Hydrological Yearbooks for the years 2017 and 2018, also 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.

3.3. ISRBC web and social networks

The new website of the Sava Commission was successfully installed on the local hardware infrastructure, and the English version was made available to general public. It contains all information from the old website, along with a modern interface and highly improved functionalities with the latest standards applied (responsive web design, SSL implementation etc.). Website content backup procedures are fully automated analogue to existing Sava GIS system backup logic.

The translation of the web content in all official languages of the Sava Commission is in progress. As soon as it is completed the web site will be available in English and all official languages of the Parties.

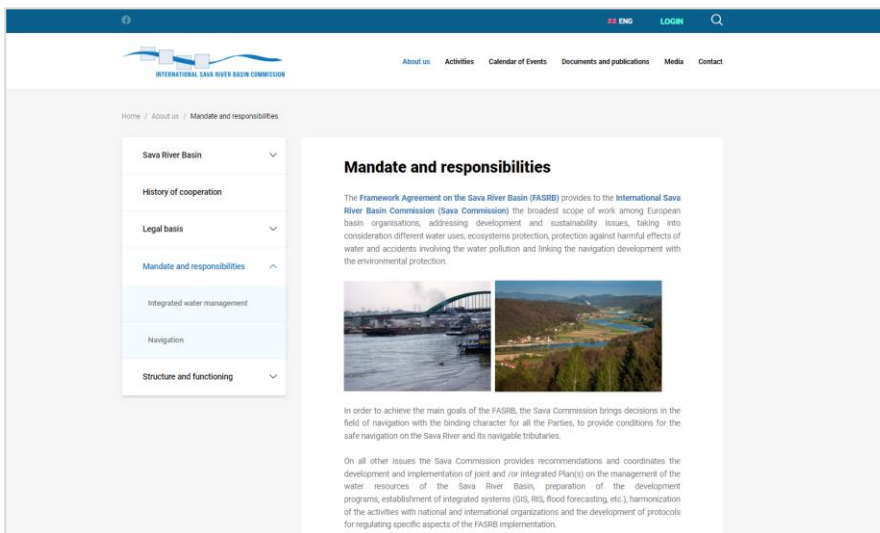


Figure 15. New ISRBC website (www.savacommission.org)

4. Cross - cutting and development issues

*Joint Plan of Actions for the Sava River Basin (JPA SRB)*⁶, 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), to be implemented through the two phases, over a 10-year period. Phase I of SDIP is actually started by implementation of sub-projects with high implementation readiness in Bosnia and Herzegovina, Serbia and Montenegro.

Regional component of SDIP is intended to support policy dialogue and consultations and to ensure coordination of implementation of the whole Program. Furthermore, it will support preparation of a range of plans and studies, relevant for the entire basin, and thus substantially contribute to the implementation of the FASRB, and to the improvement of results of other current and relevant regional activities. These activities will include *inter alia*: a new hydrological study, climate change adaptation strategy, sediment study, regional strategy for ecotourism development, further improvements of Sava GIS&HIS, upgrade of the Sava FFWS, updates of the Sava RBM and FRM plans as well as preparation of the first sediment plan for the entire Sava River Basin.

In FY 2021, ISRBC, which will serve as the implementing body for the regional component of SDIP, continued intensive cooperation with the World Bank, primarily aimed at fulfilling the preconditions for approval of a grant from the Global Environment Facility (GEF) for implementation of regional activities foreseen by SDIP, to bridge what was identified as a financing gap at appraisal of the original project. In order to ensure full compliance of the Project with the World Bank's Environmental and Social Framework (ESF), as well as to meet all other requirements needed to approval ISRBC prepared: Environmental and Social Commitment Plan (ESCP), Stakeholder Engagement Plan (SEP) as well as drafts of the procurement strategy document (PPSD) and the procurement plan for the regional activities.

The long-lasting preparatory process ended by successfully concluded negotiations between the delegations of ISRBC and World Bank on the draft Grant Agreement (GA). The meeting was held on March 30-31, 2022. The GEF approval, to be followed by the signing of the GA with the ISRBC, is expected in June 2022.

As regards other activities, ISRBC continued to regularly monitor and support 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.

⁶ JPA SRB and Joint Statement of the representatives of the Parties to the FASRB and Montenegro supporting the JPA are available here: www.savacommission.org/documents-and-publications/basic-documents/231

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 3. 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 2022	

Besides the four above-mentioned protocols in force, the table provides information on the *Protocol on Emergency Situations* that was also subject to discussions during the reporting period. The protocol 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. Negotiations on final harmonisation are expected by the end of 2022.

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) including the documents related to the abovementioned cooperation with the World Bank within SDIP.

The internal structure of the Secretariat along with the existing requirements for engagement and work of the Secretariat staff was analysed in the reporting period with the aim to update the respective internal rules taking into account the real needs of the Sava Commission, changes in education systems that took place in the past decade including new study programs with a multidisciplinary approach. Following the proposal of the Legal Expert Group, the Sava Commission adopted new *Rules of the Structure of the Sava Commission's Secretariat and job description*. The principal scheme of functioning of the Secretariat according to the new *Rules* is presented below. It should be noted here that, according to the *Rules*, the largest possible number of the Secretariat's staff is 15 and that 10 positions are currently occupied.

PRINCIPAL SCHEME OF FUNCTIONING

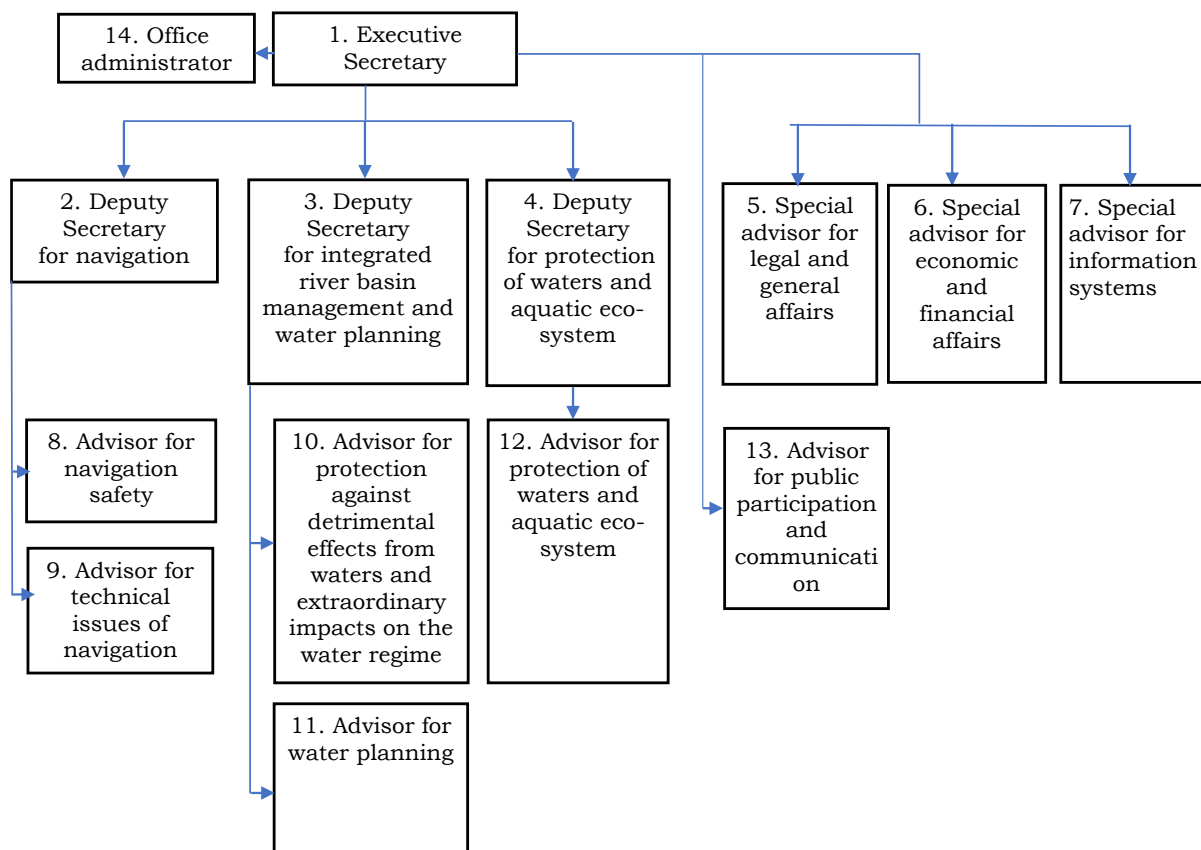


Figure 16. Scheme of functioning of the ISRBC Secretariat

The establishment of the Sava Commission's expert groups is basically regulated by the Statute of the Sava Commission (Annex 1 to the FASRB). The work of expert groups has always been of utmost importance for the successful implementation of the FASRB and has presented a strong linkage among respective authorities of the Parties and the Sava Commission. Presently, six permanent and three *ad hoc* expert groups are established and actively working. It is worth mentioning that in the reporting period, the Sava Commission significantly simplified the procedure for changing the composition of its expert groups by adopting a new decision regulating this matter. The established practice needed a more efficient approach, so instead of adopting a formal decision of the Sava Commission for each change of membership in expert groups, in the future, the composition of expert groups will be changed upon formal notice from representatives of the countries. Such change would be recorded in the report from the next following Session of the Sava Commission while the list of expert groups' members would be kept and regularly updated by the Secretariat.

5.2. Financial issues

Budget of ISRBC for FY 2021, in total amount of EUR 577,960.00, was adopted by Decision 11/21 at the 56th Session of ISRBC (Zagreb, March 23-24, 2021). It consists of the regular annual contributions of the Parties and of miscellaneous inflows.

The *General Fund* inflows and expenditures in FY 2021 are shown in Table 4 and Table 5, respectively.

Table 4. General Fund income in FY 2021

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	0.00⁵
3	Miscellaneous	18,891.40⁶
Total General Fund income		566,851.40
Notes:		
¹ The contribution was paid on May 10, 2021		
² The contribution was paid in two equal parts, on April 15 and April 16, 2021		
³ The contribution was paid on May 14, 2021		
⁴ The contribution was paid on April 29, 2020		
⁵ Transferred amounts for covering unexpected expenditures		
⁶ A part of grant funds for implementation of project: EU HORIZON 2020- SHELTER and UNESCO - Outline of the Sediment Management Plan for Sava River Basin.		

Table 5. General Fund expenditures in FY 2021

Budget Chapter		Expenditures ¹ (EUR)
1	Staff salaries and allowances	475,437.16
2	Current costs	23,903.82
3	Travel expenses	2,259.19
4	Operational costs	19,724.84
5	Equipment	0.00
Total General Fund expenditures		521,325.01²
Notes:		
¹ The amount of expenditures on March 31, 2022		
² In accordance with Financial Rules of ISRBC, the rest of the General Fund shall be allocated to the Reserve Fund.		

In FY 2021 the opening balance of Special and Trust Fund amounted to EUR 134,621.14. Additional inflow to this Fund during the period April 1, 2021 - March 31, 2022, was EUR 245,653.09 in total, for the implementation of project activities and covering costs of regular functioning and maintenance of the Flood Forecasting and Warning System for the Sava River Basin - Sava FFWS (in accordance with the *Memorandum of Understanding on cooperation concerning regular functioning and maintenance of Sava FFWS*).

Inflows in amount of EUR 87,874.70 are for the purpose of implementation the following projects:

- *Sustainable Historic Environments holistic reconstruction through Technological Enhancement and community-based Resilience – SHELTER (EU-HORIZON 2020)*,
- *UNESCO - Outline of the Sediment Management Plan for Sava River Basin and*
- *DTP - Water Contingency Management in the Sava River Basin – WACOM.*

Inflows in amount of EUR 157,587.99 contain received contributions of the Signatories of the Memorandum from the countries to cover the costs of activities at the international level within Sava FFWS.

For the above-mentioned projects and Sava FFWS, total outflow of Special and Trust Fund during FY 2021 was EUR 94,702.93.

The outflow of project activities was EUR 86,450.37, while the outflow of Sava FFWS was EUR 8,252.56.

In line with Financial Rules of ISRBC, a regular audit of the financial management of ISRBC for FY 2020 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 2020 at the 59th Session (March 15-16, 2022).

6. Cooperation and stakeholder involvement

6.1. Cooperation with international, national and local institutions

Cooperation of ISRBC with other organisations 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, and actively participated in a number of events organised by different EU bodies, including regular participation in the meetings organized by the EU financed projects which requested and obtained the ISRBC support. ISRBC also continued active involvement in the implementation of the *EU Strategy for the Danube Region*, aiming to support development of navigation and promote the transport possibilities on the Sava River as a part of the European Core Transport Network.

As usual, special attention was paid to cooperation with ICPDR and DC. In the reporting period, this collaboration was ensured by means of participation at sessions, expert group meetings and other events organised by the partner commissions. The 12th follow-up meeting of the *Joint Statement on Guiding Principles on the Development of Inland Navigation and Environmental Protection in the Danube River Basin*, coorganized by the three commissions, was held online in September 2021, formally hosted by ICPDR this time.

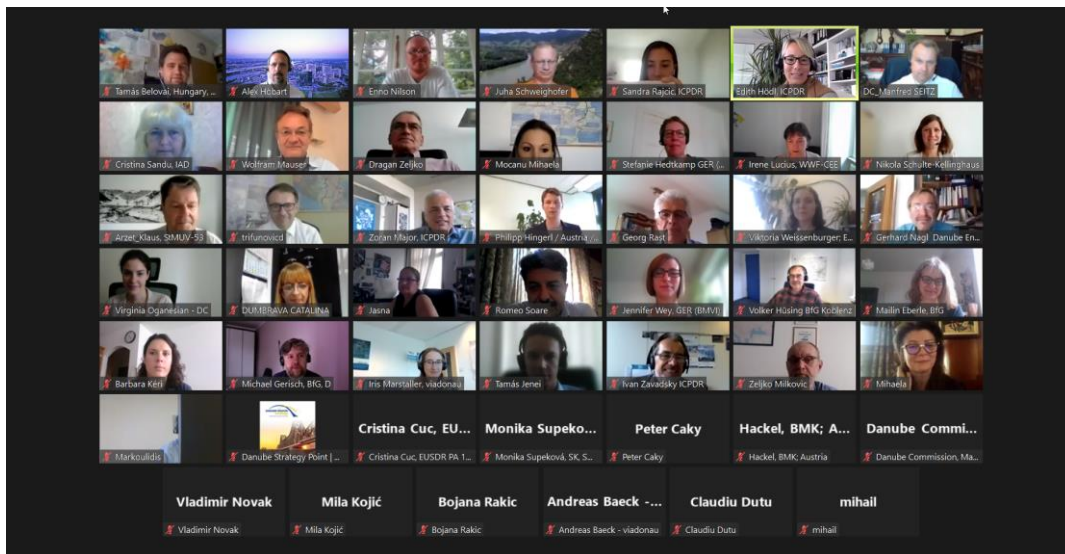


Figure 17: Joint Statement meeting (September 15-16, 2021)

Cooperation is being maintained with other navigation and river and lake protection commissions and bodies. ISRBC hosted the traditional annual meeting of heads of European river and lake commissions in August 2021, which was the first event since the beginning of the pandemic held in person in Karlovac and Zagreb. As the only commission in Europe in charge for both water management and navigation we took this opportunity as a host to invite also the representatives of the navigation commissions to initiate a fruitful exchange of opinions between the two sectors. Besides the general secretary of DC the representatives of the *International Network of Basin Organizations (INBO)* and UNECE took part in the event.



Figure 18. Heads of the European Water Commissions (Karlovac, 30 August 2021)

Cooperation with UNECE has also continued through regular participation of ISRBC in the framework of the UNECE working groups and other events, as well as through joint work in the frame of the Drina Nexus II follow-up project.

Fruitful cooperation continued with UNESCO, in particular through joint work on the SHELTER project and by collaboration in preparing of Outline of the Sediment Management Plan for the Sava River Basin.

Cooperation with regional international organisations, international financial institutions (e.g. WB), the business sector and non-governmental organisations also continued.

On a basin level, in addition to national institutions responsible for the implementation of *FASRB*, cooperation has been kept with other organisations, such as water agencies, NHMSs, inland waterway agencies, port master offices, registers of shipping, regional chambers of commerce, tourism organisations, 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 maintained throughout the reporting period. Active involvement of stakeholders is continuously ensured, above all, for institutions/organisations with observer status in ISRBC. through meetings of ISRBC and its expert groups. The list of the observers in ISRBC is given in the next table

Table 6: Observers in the Sava Commission (status on March 31, 2022)

Name	Status	Web site
Republic of North Macedonia	Permanent	https://vlada.mk
ICPDR	Permanent	www.icpdr.org
Danube Commission	Permanent	www.danubecommission.org
GWP CEE	Temporary	www.gwp.org/en/GWP-CEE
WWF Adria	Temporary	www.wwfadria.org
EuroNatur Foundation	Temporary	www.euronatur.org
Transport Community	Permanent	www.transport-community.org

6.2. Marking the Sava Day 2021 and involving young generation

As part of celebration of the International Sava River Day, ISRBC, in cooperation with the hydrometeorological services of the Parties to the FASRB, organised the symbolic installation of high-water marks at selected locations in all four countries through which the Sava flows. The event was held on June 1, 2021. It was broadcasted live from all locations. In Slovenia the high-water mark was set up in Polhov Gradec on the bridge over the river Božna, in Croatia in Slavonski Brod on the promenade along the Sava, in the Federation of BiH on the Town Bridge in Maglaj, in Republika Srpska in Modriča on the local community building, and in Serbia the high-watermark was set up at the Sava Port in Belgrade.

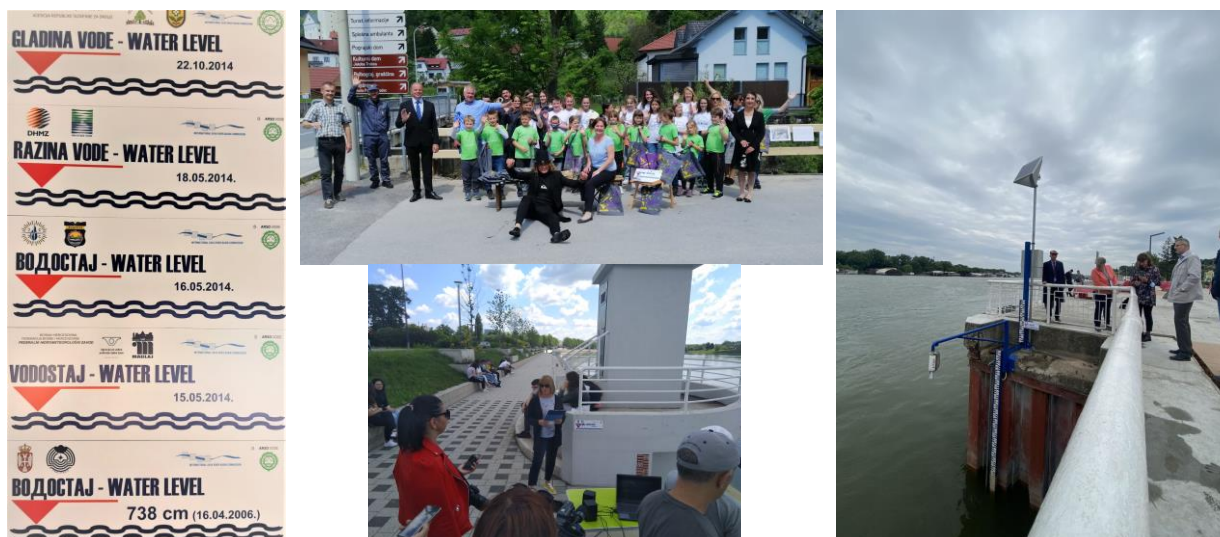


Figure 19. Marking the Sava Day 2021 by setting the high-water marks

The 9th Sava Youth Parliament was held on October 8 and 9, 2021 in a hybrid form. The organization was supported by the SHELTER project, with active participation of the UNESCO Venice Office. The slogan of this year's Parliament was "Let's protect our heritage!", with the main objective that the young people learn about the threats on cultural-historical sites in the Sava River Basin caused by the floods. The central event was organized in Banja Luka with participation of the students from BiH in person while the others took part via web.

The following schools participated:

- JU Mješovita srednja škola „Hazim Šabanović“, Visoko and Srednja stručna i tehnička škola, Gradiška (BiH) – in person,
- X. gimnazija “Ivan Supek”, Zagreb and Ekonomska, trgovačka i ugostiteljska škola, Samobor (HR) - online
- Škola primenjenih umetnosti, Šabac and Gimnazija Crnjanski, Beograd (RS)-online
- BIC Ljubljana-Živilska šola (SI)-online

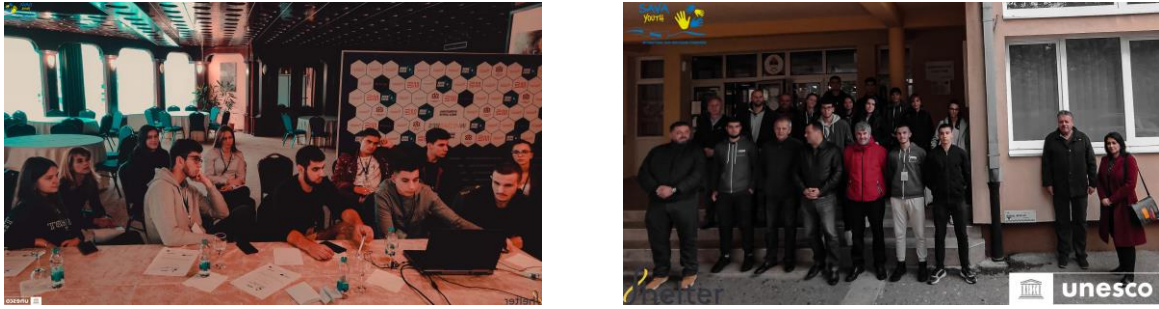


Figure 20. Participants of the 9th Sava Youth Parliament

The 9th Youth Parliament increased the knowledge of the young people on the protection of heritage sites against floods. Their views were also presented at the International Day of Disaster Risk Reduction organised by the United Nation Office for Disaster Risk Reduction held on October 13, 2021.

In addition to that, educational trips were organised for participants which were not able to be present in Banja Luka to one of the UNESCO-protected sites in their country in November 2021 (i.e. Plitvička jezera for HR schools, Golubački Grad for RS schools and Prehistoric Pile Dwellings in Ljubljansko Barje Nature Park and the Works of Jože Plečnik in Ljubljana for SI school).

More information on the Sava Youth Parliament is available at the web site of the [Parliament](https://sava-youthparliament.com/)⁷.

⁷ <https://sava-youthparliament.com/>

Annexes

ANNEX I: List of the ISRBC members and deputy members

Name and surname	Function	Institution
Bosnia and Herzegovina		
Zoran Andrić	Member	Ministry of Communications and Transport of Bosnia and Herzegovina
Vanda Medić	Deputy Member	Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina
Republic of Croatia		
Duška Kunštek	Member Chairperson	Ministry of the Sea, Transport and Infrastructure of the 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 the Republic of Serbia
Republic of Slovenia		
Mitja Bricelj	Member	Ministry for Environment and Spatial Planning of the Republic of Slovenia
Mojca Deželak	Deputy Member	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 organised/co-organised by ISRBC in FY 2021

Event	Date	Method / Venue	Organiser
WACOM project ⁸ Nacional workshops	11 May 2021 – BA 19 May 2021 – HR 27 May 2021 – SI 2 June 2021 – RS	Video link, hybrid	WACOM project partners
1 st Sava FFWS International Team for Forecasting meeting	11 May 2021	Video link	ISRBC
1 st Sava FFWS International Team for Development meeting	11 May 2021	Video link	ISRBC
1 st Sava FFWS International Team for Support meeting	12 May 2021	Video link	ISRBC
45 th PEG RBM meeting	17 May 2021	Video link	ISRBC
SHELTER project – Workshops on mapping of the governance structure of the planning and emergency management caused by floods	18 May 2021 – BA, AL 19 May 2021 – RS, SL, ME 20 May 2021 – HR	Video link	ISRBC, UNESCO
Committee for Monitoring and Coordination of Implementation of the Project Rehabilitation and Development of Transport and Navigation on the Sava River	28 May 2021	Video link	ISRBC
Sava Day 2021 – setting the high-level water marks in SI, HR, BA and RS	1 June 2021	Hybrid	ISRBC
SHELTER project – 4 th Sava Open Lab Stakeholder Workshop	8 June 2021	Video link	ISRBC, UNESCO
Meeting related to harmonise the regime of navigation on the Kupa River	16 June 2021	Video link	ISRBC
Outline of the Sediment Management Plan – kick-off meeting	16 June 2021	Video link	ISRBC
57 th Session of ISRBC	1-2 July 2021	Hybrid meeting	ISRBC
Meeting related to Rules for Sava River Waterway maintenance	14 July 2021	Video link	ISRBC
Meeting of the Heads of European water commissions	30-31 August 2021	Zagreb, Karlovac	ISRBC
WACOM Regional workshops	9 September 2021 SI/HR 16 September 2021 HR/BA	Hybrid	WACOM project partners

⁸ Only the key events are stated for projects

Event	Date	Method / Venue	Organiser
	23 September 2021 BA/RS		
1 st Sava FFWS Technical Group meeting	9 September 2021	Video link	ISRBC
SHELTER project – 3 rd meeting of the Task Group for the follow up of the project implementation	14 September 2021	Video link	ISRBC
46 th PEG RBM Meeting	15 September 2021	Video link	ISRBC
12 th meeting on the monitoring of implementation of the Joint Statement on Inland Navigation and Environmental Protection in the Danube River Basin	15-16 September 2021	Video link	ISRBC/ICPDR/DC
2 nd Sava FFWS International Team for Forecasting meeting	22 September 2021	Video link	ISRBC
2 nd Sava FFWS International Team for Support meeting	22 September 2021	Video link	ISRBC
2 nd Sava FFWS International Team for Development meeting	24 September 2021	Video link	ISRBC
1 st Sava FFWS Technical Group (continuation)	30 September 2021	Video link	ISRBC
44 th PEG FP meeting	5 October 2021	Video link	ISRBC
9 th Sava Youth Parliament	8-9 October 2021	Hybrid	ISRBC, UNESCO (SHELTER project)
58 th Session of ISRBC	21-22 October 2021	Hybrid meeting	ISRBC
23 rd PEG GIS Meeting	4 November 2021	Video link	ISRBC
SHELTER project – Peer learning webinar about the integration of the Shelter tools under Sava GIS / Sava FFWS	4 November 2021	Video link	ISRBC, IHED
Meeting related to cooperation of ISRBC and Transport Community in Waterborne Transport	12 November 2021	Zagreb	ISRBC
24 th PEG NAV meeting	16 November 2021	Video link	ISRBC
2 nd Sava FFWS Steering Group	24 November 2021	Video link	ISRBC
Outline of the Sediment Management Plan – workshop	29 November 2021	Video link	ISRBC
3 rd meeting of the Stakeholder Forum for the 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	30 November 2021	Video link	ISRBC

Event	Date	Method / Venue	Organiser
18 th PEG HMI meeting	15 December 2021	Video link	ISRBC
Sava Stakeholder Forum on the 2 nd Sava RBMP	17 December 2021	Video link	ISRBC
SHELTER project – 5 th Sava Open Lab Stakeholder Workshop	25 January 2022	Video link	ISRBC, UNESCO
Sava FFWS International Exercise	17 February 2022	Video link	ISRBC, Deltares
19 th <i>Ad hoc</i> Legal EG meeting	03 March 2022	Video link	ISRBC
45 th PEG FP meeting	09 March 2022	Video link	ISRBC
59 th Session of ISRBC	15-16 March 2022	Hybrid meeting	ISRBC
24 th PEG GIS Meeting	22 March 2022	Video link	ISRBC
2 nd Sava FFWS Technical Group meeting	30 March 2022	Video link	ISRBC

ANNEX IV: List of the FASRB-related projects implemented or ongoing in FY 2021

No	Project title	Status	Remark on the status / Implementation period	Lead partner(s) / Consultant	Budget (k€)	Funding source
1	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	<p>The purpose of the project is to introduce the Water-Energy-Food-Ecosystems Nexus ('nexus') approach and catalyse action for its adoption and implementation in South-Eastern Europe (SEE), particularly in the transboundary basins of the Drin and Drina rivers, at both national and transboundary basin levels.</p> <p>The project activities, targeting the Drina River Basin, follow up on a sequence of Drina 'nexus projects' implemented in the past, including the Sava Nexus Assessment (2014-2016), the (Phase I) Drina Nexus Assessment (2016-2017), and the Drina Nexus Follow-Up Project (2018-2019).</p> <p>The project started in February 2020 and while supposed to be finalised in 2021, is extended by the mid 2022.</p>	GWP-Med, UNECE	N/a	Austrian Development Agency (ADA)
2	Sustainable Historic Environments hoListic reconstruction through Technological Enhancement and community based Resilience - SHELTER	Active	<p>Started in June 2019;</p> <p>Implementation period 4 years;</p> <p>Kick off meeting held on June 13-14, 2019;</p> <p>Five stakeholder workshops related to the Sava case study (open lab) held in total;</p> <p>Working Task Group established for monitoring project implementation, with representatives of competent institutions (cultural heritage protection, flood, emergency management) from 5 Sava countries. Three meetings held;</p> <p>Data collected on cultural assets in areas with potential flood risk;</p> <p>IT equipment purchased and Sava GIS improved, including the integration of collected data;</p> <p>Preparatory activities for flood impact analysis concerning potentially threatened cultural assets are ongoing;</p> <p>Support to the organization of the Sava Youth Parliament 2021;</p> <p>ISRBC is involved in development of all other tasks at project level.</p>	Tecnalía, ES/ISRBC as project partner	5,999,448.75 (ISRBC 209,365.00)	H2020
3	Water contingency management plan for the Sava River Basin - WACOM	Active	<p>WACOM project was approved within the 3rd call for project proposals of the Danube Transnational Program (DTP).</p> <p>The lead partner is the University of Ljubljana, while project</p>	University of Ljubljana/ISRBC as	1,570,581.0 (ISRBC:	DTP

No	Project title	Status	Remark on the status / Implementation period	Lead partner(s) / Consultant	Budget (k€)	Funding source
			<p>partners include water management, navigation and civil protection entities from the Sava Countries and ISRBC. The project commenced on 1 July 2020, and it will be completed by 31 December 2022 (30 months). Mapping of institutions and procedures connected with coordinated planning and emergency response has been performed.</p> <p>Four national workshops have been organised in BA, SI, HR and RS, via the web or in hybrid form in May/June 2021 and three regional in SI and HR in September 2021.</p> <p>Development the modelling component for the oil slick propagation have been developed and the suitable framework for the exchange of information and coordination of identified institutions in the transnational context have been identified. ISRBC is responsible for communication activities, and it participates as project partner in all work packages.</p>	project partner	214,820.00).	
4	Outline of the Sediment Management Plan for the Sava River Basin	Finalised	<p>The project started in March 2021 and ended in December 2021.</p> <p>Expected results:</p> <p>The main outcome is the Report which includes:</p> <ul style="list-style-type: none"> - an overview of sediment management practice, - an overview of existing sediment monitoring system and data on sediment quantity and quality, - a proposal for improvements of the existing sediment monitoring systems, - an analysis of the existing sediment management issues, - a proposal for improvement of existing sediment management issues, - a proposal for preparation of the full-fledged sediment management plan. <p>In the annexes the status on sediment management in SI, HR, BA, and RS have been provided.</p>	ISRBC	12.4	UNESCO Venice Office
5	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</p>	Ministry of Sea, Transport and Infrastructure RoC/ IGH d.o.o.,	648.8	EZ (CEF HR)

No	Project title	Status	Remark on the status / Implementation period	Lead partner(s) / Consultant	Budget (k€)	Funding source
			<p>Environmental Impact Assessment Study and Design for the Action: Improvement of the navigation conditions on 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 organisations 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.</p> <p>Third SF meeting was held on November 30, 2021, 4th SF meeting is planned to be held following the approval of the EIA Study signed by the competent minister, which is expected in the spring of 2022.</p>	Zagreb Hidrokonzalt d.o.o. Zagreb Elektroprojekt d.d., Zagreb		

ANNEX V: List of external projects supported by ISRBC completed or ongoing in FY 2021

No	Project title	Status	Brief description	Budget (k€)	Funding source	Role of ISRBC
1	Danube River Basin Enhanced Flood Forecasting Cooperation - DAREFFORT	Completed June 2018 – May 2021	DAREFFORT project was 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. <u>Project formally closed by DTP on 08.03.2022.</u>	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	Completed June 2018 - November 2021	SIMONA project has responded 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. <u>The project ended on 30 November 2021.</u>	1,750	DTP	Associated strategic partner
4	Preserving Sava River Basin Habitats through Transnational Management of Invasive Alien Species - Sava TIES	Completed 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. <u>The project formally ended on 31 May 2021.</u>	1,500	DTP	Associated project partner
5	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	15,400	EU H2020	Observer

No	Project title	Status	Brief description	Budget (k€)	Funding source	Role of ISRBC
			development goals in a sustainable manner. The project draws upon a network of case studies among which Bregana, Vrbanja, Jadar and Tamnava rivers are selected as case studies in the Sava River Basin where development of prefeasibility studies and knowledge sharing activities is currently ongoing.			
6	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. <p>Current status: Equipment for improving waterway was acquired for the Austrian Danube. First part of this equipment has been in use since spring of 2021 in the form of the lighter „Bojenleger 2“ for fairway marking.</p>	42, 576	CEF	Advisory Board
7	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 	3,292	CEF	Advisory Board

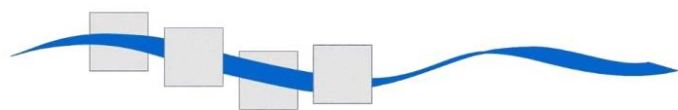
No	Project title	Status	Brief description	Budget (k€)	Funding source	Role of ISRBC
			<p>commercial maritime transport in relation to upgrade/construction of mooring sites along the Danube and the Sava River for Austria, Croatia and Serbia;</p> <ul style="list-style-type: none"> provide foundations for future implementation within the foreseen FAIRway Danube 2 project 			
8	Competence Based Education and Training for Inland Navigation - COMPETING	Ongoing January 2019 – December 2021 (final conference 14 June 2022)	<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> <p>The developments in this project will in the end result in the implementation of EU legislation (EU Directive 2017/2397), resulting in a comparable system for recognition of educational programmes and properly qualified crew with the possession of a Union certificate. In that regard, on November 9, 2021, EDINNA organized an online Q&A for its members. End conference will be held in June 14, 2022 in Rotterdam</p>	0,938	Program Erasmus+	Advisory Board
9	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
10	Platform for the implementation of NAIADES - PLATINA 3	Ongoing January 2021 - June 2023	<p>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.</p> <p>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</p>	1,999	EU H2020	Advisory Board

No	Project title	Status	Brief description	Budget (k€)	Funding source	Role of ISRBC
			centers.			
11	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
12	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 harmonised 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 VI: Acronyms & Abbreviations

AEWS	Accident Emergency Warning System
AMI	Area of mutual interest (for flood protection)
APC	Accident Prevention and Control
APSFR	Areas of Potential Significant Flood Risk
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
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
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
PFRA	Preliminary Flood Risk Assessment in the Sava River Basin
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
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