INTERNATIONAL SAVA RIVER BASIN COMMISSION

TERMS OF REFERENCE
for
Technical assistance in the

PREPARATION OF MANAGEMENT PLANS FOR THE SAVA RIVER BASIN

PROJECT	SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM (SDIP)-Phase I, Part 4 – Regional Cooperation
IMPLEMENTING AGENCY	International Sava River Basin Commission (ISRBC)
BENEFICIARY COUNTRIES	Bosnia and Herzegovina, Croatia, Serbia, Slovenia and Montenegro
ACTIVITY	Technical Assistance in the preparation of the management plans for the Sava River Basin
REFERENCE NUMBER	HR-ISRBC-505383-CS-QCBS

TABLE OF CONTENTS

1. BACKGROUND INFORMATION

This assignment is part of the regional component of the Sava and Drina Rivers Corridors Integrated Development Program (SDIP) - Phase I, with the objective to strengthen transboundary water cooperation and improve navigability and flood protection in the Sava and Drina Rivers Corridors.

The purpose of this specific assignment is to provide technical assistance in developing the three basin-wide management plans: update of the Sava River Basin Management Plan (Sava RBMP), update of the Flood Risk Management Plan for the Sava River Basin (Sava FRMP), and the first Sediment Management Plan for the Sava River Basin (Sava SMP). The outcome of the Assignment shall establish a comprehensive, integrated framework to facilitate steps towards sustainable water management in the Sava River Basin.

1.1. Description of the Sava River Basin

The Sava River Basin covers an area of approximately 97,200 km^2. Encompassing substantial portions of Bosnia and Herzegovina, Croatia, Montenegro, Serbia, and Slovenia, the Sava River Basin constitutes 12% of the Danube River Basin area, making it the second-largest sub-basin of the Danube (Figure 1).

Figure 1. Location of the Sava River Basin (source: 2nd Sava River Basin management Plan, 2022)

The Sava River is the largest tributary by discharge to the Danube River, with an average discharge of about 1,700 m^3/s, which accounts for almost 30% of the Danube's total discharge at their confluence in Belgrade. The Sava River is formed by two mountainous streams: the Sava Dolinka and the Sava Bohinjka. From the confluence of these headwaters in Radovljica, Slovenia, the Sava River is 945 km long. It flows in a northwest-southeast direction through Slovenia, Croatia, Bosnia and Herzegovina, and Serbia. A schematic longitudinal profile of the Sava River and some of its main tributaries is shown in the following figure.

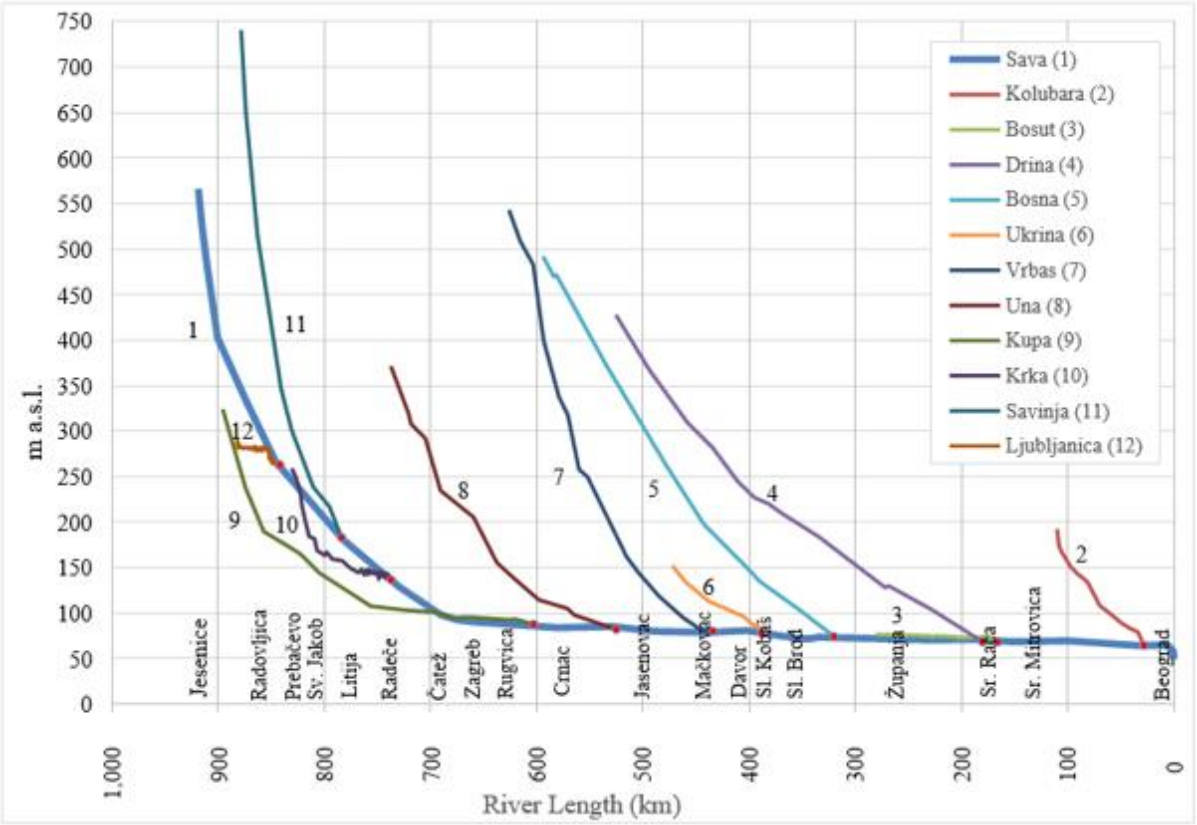

Figure 2. Schematic longitudinal profiles of the Sava River and its main tributaries (source: 2nd Sava River Basin Analysis, 2016)

A detailed elaboration of the main characteristics of the Sava River basin is provided in the 2nd Sava River basin analysis report prepared in 2016.

1.2. Legal and regulatory framework for cooperation in the Sava River Basin

In 2001, recognizing the critical need for collaboration in the sustainable utilization and safeguarding of valuable resources, the four riparian countries that share the Sava River Basin—Croatia, Bosnia and Herzegovina, Yugoslavia (subsequently Serbia and Montenegro, and later Serbia), and Slovenia—initiated a negotiation process that culminated in the Framework Agreement on the Sava River Basin (FASRB). This landmark international agreement comprehensively integrated all facets of water resource management and established the International Sava River Basin Commission (ISRBC; Sava Commission) to oversee the implementation of the FASRB, which possesses the legal status of an international organization. The FASRB was signed in 2002, ratified by the Parties[1] in the following years, and ultimately came into force at the end of 2004.
Under the terms of the FASRB, the Parties committed to collaborative efforts in the following areas:

- Establishing an international navigation regime on the Sava River and its navigable tributaries;
- Implementing sustainable water management practices;
- Taking measures to prevent and mitigate hazards such as floods, ice, droughts, and accidents, as well as to alleviate their impacts.

In addition to the FASRB, the Parties have signed several protocols aimed at enhancing collaboration, awareness, knowledge, and capacity across various sectors and levels within each Party and in the regional

[1] The Parties to the FASRB are Bosnia and Herzegovina, Republic of Croatia, Republic of Serbia and Republic of Slovenia.

context. These protocols, which are also binding international agreements for the signatory countries, delineate specific activities in targeted areas of cooperation. Currently, four protocols are in effect.

Table 1. Overview of the status of the protocols to the FASRB

Protocol on	In force since	Available at
Navigation Regime	December 29, 2004	Protocol on navigation regime
Prevention of Water Pollution caused by Navigation	October 8, 2017	Protocol on the prevention of water pollution caused by navigation
Flood Protection	November 27, 2015	Protocol on flood protection
Sediment Management	October 8, 2017	Protocol on sediment management

By Article 11 of the FASRB, the Parties committed to cooperating on the sustainable management of the Sava River basin's surface and ground waters. Furthermore, by Article 12, Parties agreed to develop the Sava RBMP, cooperating on the basis and in accordance with the Water Framework Directive (WFD)[2], as stipulated by Article 3 of the FASRB.

Protocol on Flood Protection aims to address issues related to sustainable flood protection through the prevention and/or reduction of flood hazards by undertaking appropriate measures and activities, along with adequate measures for environmental protection. The protocol stipulates that the Parties must develop an FRMP, which should define the goals of flood risk management of common interest at the basin level, measures to achieve these goals, coordination mechanisms, and modes of cooperation of the Parties in flood defense emergency situations.

Protocol on Sediment Management aims to facilitate the establishment of sustainable sediment management in the basin by addressing quality issues such as sediment pollution and controlling both the sources and deposition of polluted sediment, and quantity issues such as dredging, erosion and torrent control, reservoir sedimentation and morphological changes. The protocol stipulates the development of an SMP for the basin and outlines its required content.

Cooperation with Montenegro is established at the technical level through a Memorandum of Understanding on cooperation between the ISRBC and Montenegro (2013). The MoU provides a framework for enhancing basin-wide cooperation and coordination, and to promote a spirit of practical, pragmatic and result-oriented close cooperation and partnership in achieving the common strategic goals related to sustainable water management, taking into account the objectives and basic principles of the FASRB

1.3. Key results of cooperation in the Sava River Basin of interest for the Assignment

The implementation of the WFD in the Sava River Basin began with the development of the 1st Sava River Basin Analysis (SRBA), where quantitative and qualitative characteristics of the Sava River and its main tributaries were assessed. Moreover, key integration issues between river basin and flood risk management, as well as between water management and navigation, were addressed. The ISRBC accepted the SRBA Report in 2009 as a sound foundation for the next steps in developing the Sava RBMP.

Furthermore, in the SRBA Report, the criteria for surface and groundwater bodies to be taken into consideration for carrying out the analysis in the "Sava" planning cycles were agreed upon, established and afterwards maintained in all planning documents on the Sava River Basin level, as follows:

[2] *Directive 2000/60/EC of the EU Parliament and Council of October 23, 2000, establishing a Framework for Community Activities in the Field of Water Policy*

- The main tributaries include rivers with a catchment size >1,000 km², as well as rivers with a catchment area <1,000 km², which are considered of a basin-wide importance[3]
- The main groundwater bodies are the transboundary and national groundwater bodies which are important due to their size (area >1,000 km²), and trans-boundary groundwater bodies (area <1,000 km²) which are important due to various other criteria, e.g. socioeconomic importance, significant uses, impacts, pressures, and/or interaction with aquatic eco-system.

The activities on developing the 1st Sava RBMP began in 2009, closely following the requirements of the WFD, the methodology, processes and practice applied at the Danube River Basin level, with the level of details defined in the 1st SRBA Report. The following significant water management issues (SWMIs) in the Sava River Basin were identified: organic pollution, nutrient pollution, hazardous substance pollution, hydromorphological alterations, and pressures on groundwater quality and quantity. Additionally, several other issues are designated as 'candidate' SWMIs due to insufficient available data and information for their assessment and final identification: sediment issues (pressures on sediment quantity and quality) and invasive alien species. For each of the SWMIs, visions and management objectives were established. The plan includes the Programme of Measures (PoM), detailing the agreed measures of basin-wide significance corresponding to management objectives for each SWMI. The Parties to the FASRB approved the 1st Sava RBMP at their Fifth Meeting held in Zagreb (Republic of Croatia) on December 2, 2014.

The 2nd "Sava" planning cycle started with the preparation of the 2nd SRBA Report as an update of the first one from 2009. It was finalized in 2016 and accepted by the ISRBC in June 2017. In parallel, the Report on SWMIs with the interim overview of implementation of measures was prepared, reconfirming key issues affecting the water environment in the Sava River Basin, and approved by the ISRBC in December 2017.

Both documents represented important steps towards the first Sava RBMP update, which was prepared following the methodology applied in the development of the 1st Sava RBMP with updated data and information, for the six-year period 2022-2027. The main advancements recognized in the 2nd river basin management and planning cycle in comparison to the 1st for the Sava River Basin were:

- Numerous changes were introduced through the new surface water bodies delineation, performed in all riparian countries, except Slovenia. The changes are based on the further and more comprehensive implementation of WFD requirements and more accurate and detailed data and information taken into consideration.
- The number of groundwater bodies important in the basin-wide context increased from 48 in the 1st Sava RBMP to 60 in the 2nd Sava RBMP, allowing for a more detailed analysis.
- Significant improvement in Urban Wastewater Treatment Directive[2] (UWWTD) implementation related to agglomerations delineation in most of the basin countries.
- Increased number of population equivalent (PE) connected to the sewage networks, as well as the decrease in PE load that is neither connected to the sewage system nor treated at the wastewater treatment plants. Furthermore, a decrease of the share (28%) of all agglomeration PE >2,000 PE, which are not connected to a sewerage collection system or to a wastewater treatment plant (in comparison to 40% from the 1st plan). Significant decrease of estimated total emission load (by 53% of BOD5 and by 57% for COD) due to increased number of agglomerations with wastewater treatment plants (WWTP) in the basin (14% of agglomeration with WWTP in the 1st and 30% in the 2nd plan, mainly due to newly constructed WWTPs in Slovenia and Croatia.
- Significant improvement in data exchange practices through the ISRBC's common platform Sava GIS, and notable increase in collected data related to hydromorphology, protected areas and data on surface and ground water monitoring.
- Water status assessment practices improved significantly in all countries in terms of methodological approach and the achieved confidence level.
- Basin-wide economic analysis of water uses and water services was updated, providing elaboration of potential sources for financing PoM implementation.

[3] *This includes the following rivers with a catchment area <1,000 km²:Sotla/Sutla, Lašva and Tinja*.

- The updated PoM for the Sava River Basin was developed with the focus on implementation of the relevant EU water directives' requirements and principles, while considering the status of the EU and non-EU countries, aiming towards achievement of the environmental objectives according to the WFD, visions and management objectives for the Sava River Basin.

The Interim report on the 2nd Sava RBMP PoM implementation was prepared in accordance with Article 15.3 of the WFD and approved by the ISRBC in March 2025. It provides an overview of PoM's implementation progress and types of measures implemented in the Sava River Basin countries and on the basin-wide scale.

In **flood risk management planning,** based on the national preliminary flood risk assessments (PFRA) and identified areas of potentially significant flood risk (APSFR), the 1st joint report on the Sava PFRA was prepared by the ISRBC in cooperation with institutions of the Parties to the FASRB. The report was accepted by the ISRBC at its 35th Session on July 01, 2014. The initial Sava PFRA, which has been partially aligned to the possible extent with the requirements of the EU Floods Directive, summarized information on the preliminary flood risk assessment of Slovenia, Croatia, Serbia and part of Bosnia and Herzegovina (Federation of Bosnia and Herzegovina), while for other parts (Republika Srpska and Brčko District) and Montenegro data were included in the Sava FRMP. The Sava PFRA provided an overview of significant past floods and consequences of potential future floods, designated national APSFRs with special attention paid to the APSFRs identified along transboundary rivers. The joint Sava PFRA report has also addressed the impacts of climate change and provided an overview of transboundary coordination and information exchange.

The first Sava FRMP was developed in line with the Protocol on Flood Protection, aiming also to closely match the requirements of the EU Floods Directive[4] (FD). It addresses significant flood risk management issues of basin-wide importance, including objectives of managing the flood risk at the basin level and containing joint measures for the Sava River Basin. The Parties to the FASRB approved the Sava FRMP at their Eighth Meeting held in Sarajevo (Bosnia and Herzegovina) on October 24, 2019.

During the development of the plan, the initial Sava PFRA report served as a basis for harmonization of the APSFRs shared by two or more countries. Based on an analysis of 1,926 areas with potentially significant flood risk defined at the national level, 251 areas with basin-wide importance were identified. These areas were further grouped into 21 Areas of Mutual Interest for Flood Protection in the Sava River Basin (AMIs), as basic units for analyzing the flood risks in the Sava FRMP. The total surface of AMIs is 5,659 km^2, which is 5.8% of the total basin area, and is home to 1.4 million people (16.2% of the total population in the Sava River Basin).

The following objectives for flood risk management of mutual interest at the Sava River basin level have been defined: Avoidance of new flood risks; reduction of existing flood risks (during and after floods); strengthening resilience; raising awareness about flood risks; and implementing the solidarity principle. A common understanding of these flood risk management objectives at the Sava River basin level serves as the foundation for compiling non-structural measures at the basin level and national structural measures in AMIs. This aims to reduce the potential negative consequences of floods on human health and life, property and economic activities, the environment, and cultural-historic heritage, while also identifying mutual benefits for the Sava countries. Within the Sava FRMP, 38 structural measures in AMIs, valued at over 250 million EUR, were identified. These were based on national flood risk management plans from the EU member states Croatia and Slovenia, as well as planning and strategic documents from the non-EU countries of Bosnia and Herzegovina, Serbia, and Montenegro. Additionally, 42 non-structural measures were agreed upon, primarily focusing on AMIs or the Sava River basin as a whole, particularly emphasizing data collection, study preparation, and other activities aimed at enhancing the planning basis for the next planning cycle.

[4] *Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks*

In line with the agreed deadlines, the joint report on the Sava PFRA update 2021 has been prepared and accepted by the ISRBC at its 60th Session on June 30, 2022. In the Sava PFRA update 2021, countries updated the earlier identified AMIs and agreed that they will be used as the main analytical unit in the second planning cycle. A joint report on the Sava Flood Maps update 2024, based on the national planning documents of the Parties and Montenegro, was prepared and accepted by the ISRBC at its 68th Session on March 25, 2025. In addition to the report, the Atlas on Sava Flood Maps update 2024 has been developed as an interactive web-based tool to better facilitate the exchange of information between countries, as required by Article 7.2 of the Protocol on Flood Protection. The results of the project *Sustainable Historic Environments hoListic reconstruction through Technological Enhancement and community based Resilience* - SHELTER have been utilized within the Sava Flood Maps update 2024.

The Sava PFRA update from 2021 and the Flood Maps update from 2024 provide the foundation for the Sava FRMP update, establishing a framework for identifying non-structural and national structural measures that may contribute to achieving flood risk management objectives of common interest, while considering that the national maps and planning documents will be the main input.

Regarding sediment management, several activities have been performed. A long-term project, "Towards Practical Guidance for Sustainable Sediment Management using the Sava River Basin as a Showcase," was launched in 2012 upon the initiative of the UNESCO Venice Office, together with the UNESCO International Sediment Initiative (ISI), European Sediment Network (SedNet), and the ISRBC. The main objective of this initiative was to develop and validate practical guidance on how to achieve sustainable sediment management on the river-basin scale, using the Sava River Basin as a showcase.

The most important results of the collaboration through this initiative include:

- Towards Practical Guidance for Sustainable Sediment Management using the Sava River Basin as a Showcase- Estimation of Sediment Balance for the Sava River (2013), and
- Towards Practical Guidance for Sustainable Sediment Management using the Sava River Basin as a Showcase - Establishment of the Sediment Monitoring System in the Sava River Basin (2015).

In accordance with the requirements of the Protocol on Sediment Management, the Parties regularly exchange data on planned dredging and provide information on executed dredging, sediment disposal and treatment for the Sava River and its main tributaries since 2019.

Regarding the development of the SMP, several activities were performed:

- Program for the development of Sediment Management Plan in the Sava River Basin (2020).

  The Program outlines the activities and actions required for the development of the Sava SMP in line with the Protocol on Sediment Management, taking into account the activities that have already been completed or are ongoing in the Parties and at the basin-wide level. The Program was adopted by the ISRBC in September 2020.

- Outline of the Sediment Management Plan for the Sava River Basin (2021).

  The Outline, prepared with the support of the UNESCO Office in Venice, compiled sediment management data and practices in the Sava countries, provisionally identified gaps that need to be addressed and provided recommendations for further steps towards developing an SMP.

In addition to the above-mentioned activities, two ongoing activities within the framework of the SDIP-Phase I, Part 4: Regional Cooperation, are of particular relevance for this assignment: the preparation of the Study on Sediment, Water and Biota in the Sava River Basin, and the development of the Climate Change Adaptation Strategy for the Sava River Basin.

The key objective of the Study on Sediment, Water and Biota in the Sava River Basin is to make a crucial contribution to the further understanding of sediment-related issues in the Sava River basin by building the knowledge base, filling the identified gaps, and providing state-of-the-art knowledge to support the implementation of the FASRB and its associated Protocol on Sediment Management. Additionally, this study aims to assist in meeting the WFD objectives and fulfilling the requirements of other relevant EU environmental legislation.

The specific objectives of the Study are to:

- Upgrade the methodological approach to facilitate basin-wide compliance of monitoring practices and fill the data gaps related to sediment, water, and biota.
- Identify and assess interlinkages of the water, biota, and sediment regime (in terms of quality, quantity, and transport).
- Enable data, knowledge and information exchange about sediment quality and quantity affecting water and biota.
- Pave the way towards the development of an Integrated Sediment Management Plan for the Sava River Basin.
- Build the capacity of national experts and different stakeholders.

During the development of the study, the following main activities will be performed:

- Assessment of status and trends of sediment quantity, sediment quality and sediment-dependent water and biota, existing data on sediment/water/biota collection/exchange practices and the state-of-the-art sediment/water/biota modelling practices suitable to the Sava River Basin.
- Monitoring, data collation and data management.
- Development of a sediment model.
- Organizing a sediment, water and biota sampling campaign.
- Proposal of how to develop an integrated sediment management plan for the Sava River Basin compliant with legal obligations (FASRB, WFD and other relevant EU policies), and World Bank Environmental and Social Framework (ESF).

The Study development started in May 2025 and is planned to last 14 months.

Regarding climate change adaptation and its integration with RBM, FP and SM issues, the Climate Change Adaptation Strategy for the Sava River Basin (CCA Strategy) and Action Plan for implementation of adaptation actions will be developed with a basic aim to enhance adaptive capacity and resilience to climate shocks in the Sava River Basin.

The specific objectives of the CCA Strategy are to:

- To enhance the stakeholder capacity to effectively anticipate and respond to climate change and their involvement in the climate change adaptation process at the transboundary level, ensuring intersectoral and basin-wide coordinated adaptation efforts.
- To assess climate change vulnerability, risks and impacts on water resources, water infrastructure, aquatic ecosystems, and water-dependent sectors, taking into consideration climate-related hazards.
- To define vision and adaptation objectives and to identify climate adaptation options suitable for the Sava River Basin.
- To propose an Action plan for the implementation of adaptation actions and to identify key programs/activities/projects/investments necessary for planning, management, and implementation of prioritized adaptation options through specific basin-wide actions.
- To develop an easy-to-use interactive web-based tool to present findings of the CCA Strategy to a wide range of stakeholders.
- To develop a monitoring and evaluation framework for the follow-up of the strategy implementation, including a set of indicators to assess the effectiveness of adaptation actions and facilitate adjustments of the strategy over time.

The CCA Strategy development shall start in September 2025 and is planned to last 13 months.

This assignment will need to incorporate the results and outcomes of the above-mentioned ongoing activities.

The Sava GIS Geoportal represents the main platform for information and data exchange, enabling users to view, share and retrieve geographic information and datasets for the entire Sava River Basin. The Sava GIS Geoportal currently comprises the following thematic modules of primary interest for this Assignment:

- RBM module – designed and structured generally in accordance with the WFD Reporting Guidance 2016 v4.9, contains complete datasets related to two RBM planning cycles, except the datasets related to PoM and economic analysis.
- FRM module – designed and structured generally in accordance with the FD Reporting Guidance 2018, contains datasets related to the first Sava FRMP, and additional datasets on flood protection structures and cultural and historical heritage endangered by floods.

In addition, the Geoportal also includes a NAV module with data and information related to inland navigation, an APC module for accident pollution management and an HIS module designed for meteorological and hydrological data and information exchange.

More details are available here: www.savagis.org.

2. OBJECTIVES OF THE ASSIGNMENT

2.1. Overall objective

The overall objective is to enhance water resources management and increase capacities for planning and implementing environmental and climate change actions in the Sava River Basin.

The objective of this Assignment is to provide technical assistance in updating the 2nd RBMP and the 1st FRMP, and in developing the 1st SMP for the Sava River Basin, aligned with the FASRB and its related Protocols and relevant EU environmental acquis.

This Assignment will facilitate the identification of common objectives and foster coordinated action across all planning instruments within the region, ensuring integration, consistency and synergies in planning, financing, and policy development.

2.2. Specific objectives

Specific objectives comprise the following:

- Develop the update of the Sava RBMP with accompanying PoM.
- Develop the update of the Sava FRMP with accompanying PoM.
- Develop the first Sava SMP with accompanying PoM.
- Develop a document to comprehensively outline and analyze the interlinkages between the RBMP, FRMP, and SMP.
- Develop Joint Plan of Measures (JPM) for integrated management of the Sava River Basin, ensuring coordination of measures implementation, timelines, and synergies across sectors at the national and transboundary levels.
- Prepare a methodology for monitoring and evaluating the implementation of measures by defining indicators that assess their effectiveness and facilitate the adjustment of plans over time.
- Design and implement a comprehensive stakeholder engagement process and public consultation campaigns to support the development of basin-wide plans, ensuring alignment with the EU WFD and FD, based on the FASRB and its related Protocols and common ISRBC practices.
- Develop a Follow-up Strategy on the Sava Planning Process as a structured and forward-looking framework that builds on the outcomes of the Plans to guide future actions, ensure continuity, and enhance the effectiveness of integrated water resources management in the Sava River Basin.

3. SCOPE OF SERVICES

To fulfill the aforementioned objectives, the Consultant's scope of services should comprise the activities indicated below. This list is not exhaustive, and the Consultant may propose and implement additional activities during the assignment as deemed necessary to effectively achieve the project objectives.

3.1. Inception activities

- Conduct a comprehensive analysis of the related activities on the basin-wide and national level, and an assessment of the status: of the plans and associated planning documents on the Sava basin level (Section 1.3), as well as the current national plans and relevant planning documents in the Sava countries, including river basin management plans, flood risk management plans, and documentation related to sediment issues - to identify gaps, inconsistencies or misalignments with the EU legislative requirements, and to provide a basis for necessary updates.
- Propose methodology and develop a coordinated roadmap for the simultaneous preparation of all basin-wide plans under this Assignment to ensure efficiency, avoid duplication of efforts, and establish clear interlinkages between all components.
- Identify key stakeholders, develop the methodology for the preparation and implementation of stakeholder engagement and the public consultation process in accordance with Article 14 of the WFD, Article 9 and 10 of the FD, and in line with the ISRBC's procedures.

3.2. Building the blocks of the Sava Management plans

3.2.1. Elaboration of the Plans[5]

A. The Sava River Basin Management Plan update

The Consultant shall build upon the structure and content of the 1st and 2nd Sava RBM plans, incorporating findings from the inception phase to revise and update the Plan, as outlined by chapters below:

1. Introduction

- Update introductory content to reflect developments since the 2nd Sava RBMP, including:
  - Purpose and scope of the RBMP update.
  - Overview of legislative and policy frameworks.
  - Competent authorities and mechanisms of coordination at the basin level.
  - Summary of significant changes on transboundary and national levels since the 2nd Sava RBMP approval.

2. General Characteristics of the Sava River Basin

- Revise and update basin characterization, focusing on changes between RBM cycles and their impact on RBM planning, such as land use and climate characteristics.
- Surface Water Bodies (SWB)
  - Review the existing and collect and analyze updated data related to SWBs and update the mapping of location and SWBs' boundaries. Identify inconsistencies and prepare a proposal for the harmonization of transboundary water bodies.
  - Update data on water body types and collect data on related reference conditions
  - Analyze and update the designation of the heavily modified water bodies (HMWBs) and candidate HMWBs of basin-wide importance. Analyze existing designation criteria and methodologies in the Sava countries, assess comparability, and if gaps or inconsistencies are identified, provide a proposal for revision.
  - Prepare updated sub-catchment delineation and proposal of drainage areas of updated water bodies.
- Groundwater Bodies (GWB)
  - Review existing data and collect and analyze updated data (aquifer characteristics, recharge areas, and flow directions), and provide the aquifer characteristics, recharge areas, and flow directions (with special focus on karstic areas).
  - Update the mapping of locations and GWB' boundaries.
  - Identify gaps and inconsistencies and prepare a proposal for the harmonization of transboundary GWBs.

3. Pressures and Impacts

- Revise and update criteria for basin-wide assessment of pressures and impacts.
- Reassess and expand the list of SWMIs, if additional issues are recognized (e.g., microplastics, emerging pollutants, sediment, climate change impacts, or others).
- Propose an update of the methodology for pressures and impacts assessment for all SWMIs and "candidate" SWMIs.
- Perform detailed assessments of:
  - Pressures of point/diffuse source pollution (organic, nutrient, hazardous substances)
  - HYMO pressures (including Future Infrastructure Projects- FIPs)
    - Free-flowing river sections and restoration opportunities: provide preliminary recommendations for river continuity enhancement while ensuring compliance

[5] *The exact content of all three plans shall be proposed and agreed upon during the Inception Phase of the Assignment.*

with national and international legal frameworks (e.g., advise how to select sites and finance removal of obsolete barriers).

- Sediment quantity and quality (in parallel with the SMP and in accordance with the Study on Sediment, Water and Biota in the Sava River Basin).
- Invasive alien species – presence, distribution and ecological impact.
- Water use and demand across sectors, including scenarios and water balance analysis
  - Compile and analyze existing data on sectoral water use, including household supply, agriculture, industry, hydropower, navigation, and ecosystem needs, from national and other available sources.
  - Identify and categorize all major water users within the basin, including registered abstractions and estimated unregulated or informal uses.
  - Evaluate current water demand trends and seasonal variations, considering population growth, economic development, climate variability, and land use changes.
  - Prepare future water demand scenarios under different development pathways and climate change assumptions, using appropriate tools.
  - Assess the balance between available water resources and total water demand, identifying potential conflicts, stress areas, and opportunities for improving water use efficiency and allocation.
- Other SWMIs and candidates, if recognized

4. Protected Areas

- Analyze and update the identification and mapping of protected areas as per Article 6 and Annex IV of the WFD.

5. Monitoring of Surface Water, Groundwater and Protected Areas

- Analyze surface and groundwater monitoring networks, sampling procedures and laboratory practices, identify gaps and inconsistencies, and propose improvements.
- Propose procedures for data exchange and prepare a proposal for joint monitoring campaigns for transboundary water bodies.

6. Status and Risk Assessment

- Update ecological status/potential and chemical status of SWBs.
  - Evaluate biological monitoring practices in the Sava countries and their comparability (e.g., phytoplankton, macrophytes and phytobenthos, benthic invertebrate fauna, and fish fauna as required by WFD).
  - Provide recommendations for the establishment of the intercalibration network (selection of the SWB types in each ecoregion to be included in the intercalibration network, with the list of relevant pressures and biological quality elements to be analyzed).
- Update status and risk of GWBs (quantitative and chemical), considering both environmental and usage criteria.
- Propose harmonized methodologies for basin-wide and transboundary status assessment by:
  - Analyzing the status and risk assessment methodologies and results, including identifying gaps concerning the WFD and related directives requirements.
  - Proposing the upgrade of the existing methodologies, in particular on transboundary water bodies.

7. Environmental Objectives and Exemptions

- Reassess and, in consultation with stakeholders, update, if necessary, visions and management objectives for each SWMI and candidate SWMI.
- Elaborate on the application of exemptions under Article 4 of the WFD.

8. Economic Analysis

- Update the economic analysis of water uses and services for the Sava River Basin.

9. Programme of Measures (PoM)

- Develop the updated PoM including cost estimates, which should comprise:
  - Official measures of basin-wide importance from national plans.
  - Additional transboundary measures (resource-dependent).
- Develop a monitoring and evaluation framework (indicators, reporting obligation, schedule, etc.) to track the implementation progress of PoM, effectiveness of outputs after 6-year implementation period, and to facilitate structured reporting.
- Develop scenarios reflecting future developments and their effects on RBM.

10. Integration Issues

- Address integration issues of water-dependent sectors (FRM, navigation, agriculture, hydropower, etc.).

11. Climate Change Adaptation

- Elaborate on climate change effects in the basin and possible adaptation measures, taking into account the findings of the Climate Change Adaptation Strategy for the Sava River Basin.

12. Stakeholder Engagement

- Summarize stakeholder engagement implemented in the frame of the RBMP development.

13. Key findings

- Provide a concise overview of the key findings, conclusions and recommendations.

Annexes: The Plan will be supplemented with annexes that will contain additional or expanded information compared to that provided in the main text of the Plan, generally in accordance with the content and elaboration of the Sava RBMP 2022. The exact number of annexes will be determined during the development of the Plan.

GIS Maps: The Plan will be supplemented by an updated set of GIS maps, similar to those in the previous RBMP, including additional maps as needed.

Supporting Documentation: Since building the blocks of the Sava RBMP requires consensus on the approach to specific issues, the Consultant is required to prepare:

- **Discussion papers,** aiming to achieve a common understanding and approach towards specific topics in the development of the Plan.
- **Background documents** to support all major chapters of the Plan, explaining rationale, methodologies, and findings related to the specific topic. The documents should include, but not be limited to, the elaboration of the SWMIs, Pressures and impacts assessment, Status assessment, Monitoring, Economic analysis, Programme of Measures and Integration issues.

B. The Sava Flood Risk Management Plan update

The Consultant shall build upon the analysis of the 1st Sava FRMP, the 2021 PFRA update, and the 2024 Sava Flood Hazard and Risk Maps update, and incorporating findings from the inception phase and recent developments, update and expand the Plan, in the following proposed structure aligned with the EU Floods Directive:

1. Introduction

- Update introductory content to reflect developments since the 1st Sava FRMP, including:
  - Purpose and scope of the FRMP update.
  - Overview of legislative and policy frameworks.
  - Competent authorities and mechanisms of coordination at the basin level.

- Summary of significant changes on the transboundary and national levels since the 1st Sava FRMP approval.

2. Description of the Sava River Basin

- Revise and update the basin description, focusing on changes between FRM cycles, such as:
  - Geographical and hydrological characteristics.
  - Land use, climate trends, and socio-economic factors.

3. Conclusions of the Sava PFRA Update 2021

- Summary of findings from the 2021 Sava PFRA update and national PFRAs.
- Changes in designated APSFRs and implications for FRM.
- AMIs in the Sava River Basin.

4. Conclusions of the Sava Flood Hazard and Risk Mapping Update 2024

- Overview of the flood hazard and risk maps update, mapping methodologies and scenarios considered at the national and transboundary level.
- Identification of potential adverse consequences on human health, environment, economy, and cultural heritage.
- Key findings and conclusions.

5. Objectives of Flood Risk Management

- Assess the progress towards the FRM objectives from the 1st FRMP.
- Reassess objectives based on new data and risk assessments and propose possible modifications.

6. Measures for Achieving Objectives

- Review and update, if required, the Catalogue of measures from the 1st FRMP.
- Develop the updated PoM, which should comprise:
  - Structural measures in AMIs (or those that affect FRM in AMIs).
  - Non-structural measures of basin-wide importance.
  - Assessment of transboundary impacts.
  - Prioritization and implementation timeline.
- Provide an overview of financing and resource allocation, including:
  - Cost estimates for proposed measures.
  - Overview of funding sources and financial instruments.
  - Strategies for securing and allocating resources.
- Develop a monitoring and evaluation framework (indicators, reporting obligation, schedule, etc.) to track the implementation progress of PoM, effectiveness of outputs after 6-year implementation period, and to facilitate structured reporting.

7. Transboundary cooperation in flood emergency situations

- Provide an overview of:
  - Current situation related to procedures and mutual assistance
  - Proposals for improvement.

8. Stakeholder engagement

- Summarize stakeholder engagement implemented in the frame of the FRMP development.

9. Key findings

- Provide a concise overview of the key findings, conclusions and recommendations.

Annexes: The Plan will be supplemented with annexes that will contain additional or expanded information compared to that provided in the main text of the Plan, generally in accordance with the content and elaboration of the Sava FRMP 2019. The exact number of annexes will be determined during the development of the Plan.

GIS Maps: The Plan will be supplemented by an updated set of GIS maps, similar to those in the previous FRMP, including additional maps as needed.

Supporting Documentation: To facilitate the effective development of the updated Sava FRMP and ensure all key planning blocks are supported by sound evidence and coordinated understanding among stakeholders, the Consultant will be tasked with preparing targeted discussion papers and background documents. These will serve as inputs to consensus-building, technical harmonization, and final plan formulation.

- **Discussion papers,** aiming to achieve a common understanding and approach towards specific topics in the development of the Plan.
- **Background documents** to support all major chapters of the Plan, explaining rationale, methodologies, and findings related to the specific topic. The documents should include, but not be limited to, the elaboration of PFRA and FHR maps, Flood receptors and risk indicators (including cultural heritage assets typologies and damage/impact functions per asset typology), Status and effects of critical infrastructure (e.g. water accumulations, retention areas and reservoirs) on downstream transboundary areas, Transboundary emergency coordination mechanisms, Funding and Monitoring.

C. Sediment Management Plan for the Sava River Basin

The Consultant shall, following the requirements of the Protocol on Sediment Management, relevant EU directives and based on the Outline for the Sediment Management Plan in the Sava River Basin and findings of the Study on Sediment, Water and Biota in the Sava River Basin, and incorporating findings from the inception phase, develop the Sava SMP, as outlined by chapters below:

1. Introduction

- Provide introductory content to set the scene for the SMP development, including:
    - Objectives of the SMP development.
    - Scope and Methodology.
    - Link with other Sava River Basin planning documents.

2. Evaluation of Sediment Quantity and Quality

- Provide an overview of the basin-wide sediment quantity characteristics, by:
    - Presenting historical channel changes and river morphology, including sediment sources, pathways, storage zones and sinks.
    - Assessing sediment transport and deposition patterns.
    - Evaluating the sediment budget at the basin and sub-basin scale
    - Identifying and evaluating anthropogenic influences on sediment quantity, including impacts of hydropower plants, channelization and dredging.
    - Identifying and evaluate sediment quantity hot spots affecting water uses, including:
        - Zones of excessive sedimentation.
        - Sediment deficit areas.
- Provide an overview of the basin-wide sediment quality characteristics, by:
    - Identifying and evaluate anthropogenic or natural influences on sediment quality and affected areas.
    - Assessing sediment contamination risks and identifying sediment quality hot spots.

3. Overview of Sediment Management Practices

- An overview of legislative and policy frameworks.
- List of competent authorities and mechanisms of coordination at the basin level.
- Elaborate sediment management practices and challenges under climate and land-use change scenarios.
- Elaborate existing sediment management monitoring and identify gaps.

- Perform a comprehensive inventory of the designated Sediment Management Units (SMU), which should include:
    - Review of geographic extent and river reach description.
    - Characterization of sediment conditions in SMUs.
    - Linkages with WFD water bodies and other planning units.

4. Programme of Measures (PoM)

- Identify sustainable sediment management measures, including
    - Objectives and principles
    - Measures that should include, but are not limited to:
        - Preventing water or sediment pollution from dredging.
        - Controlling erosion, torrents, and sediment processes.
        - Maintaining water regime integrity.
        - Ensuring safe navigation conditions.
        - Protecting wetlands and retention areas.
        - Managing reservoir sedimentation.
        - Reconnecting rivers with floodplains to reduce sediment deficit.
        - Controlling sediment extraction volumes and practices.
- Perform prioritization of sustainable sediment management measures
    - Evaluation Criteria (Feasibility, Impact, Cost).
    - Prioritization Process and Results.
    - Short- and Long-Term Action Priorities.
- Develop the PoM, which should comprise:
    - Identified measures of basin-wide importance.
    - Cost estimates for proposed measures.
    - Overview of funding sources and financial instruments.
- Develop a monitoring and evaluation framework (indicators, reporting obligation, schedule, etc.) to track the implementation progress of PoM, effectiveness of outputs after 6-year implementation period, and to facilitate structured reporting.

5. Stakeholder Engagement

- Summarize stakeholder engagement implemented in the frame of the SMP development.

6. Key findings

- Provide a concise overview of the key findings, conclusions and recommendations.

Annexes: The Plan will be supplemented with annexes that will contain additional or expanded information compared to that provided in the main text. The exact number of annexes will be determined during the development of the Plan.

GIS Maps: The Plan will be supplemented by a set of GIS maps. The exact number of maps will be determined during the development of the Plan.

Supporting Documentation: To facilitate the effective development of the **Sava SMP** and ensure all key planning blocks are supported by sound evidence and coordinated understanding among stakeholders, the Consultant will be tasked with preparing **targeted discussion papers and background documents**. These will serve as inputs to consensus-building, technical harmonization, and final plan formulation.

3.2.2. Data Collection and Map Production

- For all three plans, the Consultant shall establish the methodological framework for data collection and management process, including:
    - A comprehensive assessment of data requirements and availability for the execution of this Assignment.

- A detailed schedule for the collection of all relevant data and information required for the Assignment, ensuring consistency, avoiding duplication, and enabling the efficient use of shared datasets.
- Design of templates for data collection and management, considering data themes of the latest versions of the Guidance for Reporting under EU directives, other sources relevant to the assignment (e.g., INSPIRE Natural Risk Zones Technical Guidelines, etc.), and additional needs of the Sava countries.
- Review the existing Sava GIS geodatabase and propose an update based on the latest versions of the guidance for reporting under EU directives, considering other sources relevant to the assignment and the needs of the Sava countries.
- Collect all required data necessary for the implementation of the Assignment, ensuring data accuracy, completeness, and compliance with agreed standards.
- Integrate all collected spatial data into a Sava GIS geodatabase, organized in a structured manner to facilitate efficient data management and future updates.
- Prepare and deliver high-quality maps based on the GIS database, including:
  - Maps formatted for A4 paper size for inclusion in reports and documentation;
  - A GIS Atlas comprising maps formatted for A3 paper size, suitable for detailed spatial analysis and presentation.
  - Ensure all maps are consistent in terms of scale, symbology, and layout, and aligned with previous project documentation where applicable.

- The Consultant shall provide assistance to water management authorities to develop methodologies that can be used in situations where there are data gaps or insufficient data.

3.2.3. Integration Issues and Climate Change affecting RBM, FRM and SM

- Evaluate the relevance of previously analyzed integration issues in key development areas (navigation, hydropower, flood protection, agriculture) and identify any additional ones if needed.
- Assess the impact of the current and planned activities in the aforementioned development areas on the river basin, flood risk and sediment management in the Sava River Basin. Propose concrete steps for integrating relevant Sava planning elements into the planning and implementation processes of the identified development areas to enhance cross-sectoral cooperation and create synergies.
- Ensure alignment of climate change adaptation priorities in river basin management, flood risk mitigation, and sediment management with the strategic outcomes of the SDIP ongoing initiative 'Climate Change Adaptation Strategy for the Sava River Basin.

3.2.4. Follow-up Strategy

- Prepare a review of the strengths and remaining weaknesses of the management Plans for the Sava River Basin, including a detailed gap analysis, which would serve as the basis for the preparation of subsequent work programmes on the international (basin-wide) level for the following planning cycles.
- Develop a JPM for the Sava River Basin that should contain all defined measures from the Sava Plans, analyze their interdependencies, identify potential conflicts and complementarities, and propose multi-benefit solutions that address multiple issues simultaneously.
- Propose a comprehensive monitoring and evaluation framework that includes mechanisms for tracking implementation progress of activities and outputs, and assigning responsibilities, providing possibilities for adjusting actions, to ensure effective implementation of the JPM. The relevant monitoring and evaluation framework should be incorporated into RBM, FRM, and SM plans.
- Develop an interactive web-based tool, in an accessible format, to present JPM for the Sava River Basin for a wide range of stakeholders (policy/decision makers, general public,

etc.). The basic functionality[6] should enable users to access, analyze, and visualize information (through interactive maps, graphs and data visualization using appropriate libraries) and allow users to select actions and measures for each of the Plans. The task includes the development of a design and prototype and thorough testing of the initial version of the web-based tool by stakeholders. All shortcomings and bugs identified during testing must be resolved. Final testing and operationalization should be conducted to ensure compliance with all technical requirements. This includes verifying its functionality within the ISRBC's IT environment, with a focus on reliability, security, multi-user access, and efficiency/performance.

3.3. Capacity building, Stakeholder Engagement and Communication

3.3.1. Capacity Building

- The Consultant will organize and deliver workshops/training sessions that should cover all topics listed below, within the framework of ISRBC's Permanent Expert Group (PEG) for RBM meetings:
    - Intercalibration processes.
    - Economic analysis issues.
    - Practical application of exceptions under Article 4 of the WFD, with a focus on exception 4(7).
    - Towards harmonization of the basin-wide methodologies for GWBs chemical status assessment.
    - Management of plastic and microplastics on transboundary water bodies.
    - Accidental pollution prevention (mechanism for basin-wide cooperation).
    - Drafting water permits aligned with measures outlined in RBMPs. (EU Experiences).
    - Good practices and recommendations for establishing sustainable sediment monitoring
    - Examples of sediment planning processes in international river basins.
- The Consultant will organize and deliver workshops/training sessions that should cover all topics listed below, within the framework of the ISRBC's PEG for FP meetings:
    - Mapping & risk methodology, including modelling, characterization of floods (sources, mechanisms, characteristics), assessing flood damage and losses, drawing conclusions based on mapping.
    - Planning of measures and evaluation of impacts.
    - Dike behavior, monitoring and inspection, and failure mechanisms.
    - Flood defense, warning procedures and emergency response measures.

Detailed knowledge transfer programme should be prepared (in Inception phase), aligned with the Assignment's implementation phases.

3.3.2. Stakeholder Engagement

Focusing on opportunities to improve efficiency, exchange information, and achieve common synergies and benefits, throughout the Assignment, the Consultant shall organize the following events with the participation of key stakeholders:

- Kick-off meeting to present the planned activities and gather feedback from participants.
- 1st Stakeholder Forum to showcase completed activities, and to discuss and gather feedback on specific topics related to each plan, such as designation of SWMIs, visions and management objectives, integration issues, etc.

[6] Functionalities should support the online public and private/restricted domain, promote integration of open-source data and enable access to external data sources, where possible, but should not be restricted by licenses, recurring subscription fees, or specific data sets owned by a single entity. The tool should be designed as a scalable and flexible solution to allow the incorporation of innovative functionalities (artificial intelligence, machine learning, etc.). All coding should be open for ISRBC and in line with ISRBC practices

- 2nd Stakeholder Forum to present and gather feedback on draft plans, accompanying measures, and to announce the official launching of the public consultations campaign.

The events will primarily be held in person, with the option for online participation. The Consultant will cover the costs associated with organizing the events, which include a suitable meeting room equipped with modern technical amenities such as excellent sound systems, quality lighting, a projector, screen, and high-speed internet, as well as refreshments and lunch for in-person participants. For experts unable to attend the training sessions in person, access will be provided through a web application like MS Teams or Webex. For each event, the Consultant should prepare (i) an agenda with background information, (ii) draft documents, and presentations highlighting critical issues for discussion. The Consultant shall moderate events and compile the minutes of the events. The estimated number of in-person participants is 25 for the kick-off meeting and 40 for the forums. The list of participants for each event will be defined in cooperation with the ISRBC.

The Consultant should establish an online platform, such as SharePoint (using the ISRBC account), for registered users, which will ensure continuous communication between the Client and the Consultant as well as the main stakeholders. This may include a forum that allows for easy discussion about different categories, i.e. relevant topics. It also may include all documentation produced during the project implementation to update beneficiaries with the latest information.

3.4. Communication Activities

During the implementation of the assignment, the Consultant will prepare for each of the Assignment's milestones, appropriate materials for public release. These may include short videos, press releases, and online news articles in English and one of the official languages of the Parties to the FASRB.

4. MAIN DELIVERABLES

The Consultant should provide the following deliverables:

1. **Updated Sava River Basin Management Plan (RBMP)**
   - Updated RBMP document.
   - Accompanying Programme of Measures (PoM).
   - Background technical and analytical documents supporting the RBMP update.
2. **Updated Sava Flood Risk Management Plan (FRMP)**
   - Updated FRMP document.
   - Accompanying Programme of Measures (PoM).
   - Background technical and analytical documents supporting the FRMP update.
3. **First Sava Sediment Management Plan (SMP)**
   - Draft and final versions of the first SMP.
   - Accompanying Programme of Measures (PoM).
   - Background technical and analytical documents supporting the SMP development.
4. **Comprehensive Interlinkages Analysis Report**
   - A detailed report outlining and analyzing interlinkages and synergies between the RBMP, FRMP, and SMP, with identified overlaps, gaps, and opportunities for integration.
5. **Joint Plan of Measures (JPM)**
   - A consolidated JPM document integrating actions/measures from RBMP, FRMP, and SMP.
   - Defined coordination mechanisms for implementation across sectors and countries.
   - Timelines and milestone framework for measures implementation.
6. **Methodology and Framework for Monitoring & Evaluation**
   - Proposed methodology for monitoring and evaluating the implementation of the Plans.
   - Roles and responsibilities matrix for all involved stakeholders/countries.

- Defined indicators to assess the effectiveness of measures, considering existing national indicators where applicable.

7. Stakeholder Engagement and Public Consultation Strategy

- Detailed stakeholder engagement plan for basin-wide involvement.
- Implementation report of the stakeholder engagement and public consultation process.
- Documentation ensuring alignment with EU WFD, FD, FASRB, related Protocols, and ISRBC practices.

8. Follow-up Strategy on the Sava Planning Process

- A forward-looking framework document guiding future actions and plan continuity.
- Recommendations for institutional arrangements and resources to maintain integrated water resources management effectiveness.
- Strategy to adapt and update plans based on monitoring outcomes and changing conditions.

9. Summary of the Management Plans for the Sava River Basin

5. REPORTING REQUIREMENTS AND TIME SCHEDULE FOR DELIVERY

5.1. Reports and Associated Deliverables

Month	Report /Milestone	Deliverable/Indicator
3	Inception Report	Kick-off meeting carried out and related Report prepared. Assessment of existing planning documents performed. A comprehensive road map prepared. Detailed knowledge transfer programme developed. Stakeholder engagement and public consultation strategy developed.
6	1st Stakeholder Forum	1st Stakeholder Forum carried out and related report prepared.
8	Intermediate Report I	Drafted chapters 1-7 (as defined in these ToR Chapter 3.2.1 Section A) for the Sava RBMP. Drafted chapters 1-5 (as defined in these ToR Chapter 3.2.1 Section B) for the Sava FRMP. Drafted chapters 1-3 (as defined in these ToR Chapter 3.2.1 Section C) for the SMP. Related discussion papers and background documents prepared. 1st part of the training prepared and delivered.
	2nd Stakeholder Forum	2nd Stakeholder Forum carried out and related report prepared.
13	Intermediate Report II	The following Sava Management Plans drafted for the public consultation process: Sava RBMP with accompanying PoM. Sava FRMP with accompanying PoM. Sava SMP with PoM. Related discussion papers and background documents prepared. Joint Plan of Measures drafted. Comprehensive Interlinkages Analysis Report drafted. 2nd part of the training prepared and delivered
14-18	Public Consultation	Report on public consultation and response document.
21	Final Report	Draft finals Sava RBMP, FRMP and SMP prepared and ready for approval - prepared in English, with translation in all official languages of the Parties. All background documents prepared. Joint Plan and Measures finalized. Comprehensive Interlinkages Analysis Report finalized. Training materials and reports completed and delivered. Methodology and Framework for Monitoring & Evaluation prepared.

Month	Report /Milestone	Deliverable/Indicator
		Operational version of the web-based tool delivered. Follow-up Strategy prepared and delivered. Report on Stakeholder engagement. Summary on the Management Plans for the Sava River Basin (max 30 pages) prepared.

5.2. Format of Reports and Deliverables

All reports and deliverables shall be submitted in English, in editable digital format, to the Project Coordinator for review at least one month before final submission. The Consultant shall submit final versions within 10 business days of receiving comments. Approved reports shall be delivered in digital format and two hard copies. All underlying data and visual elements must also be provided in an editable digital format.

The draft finals of the Sava River Basin Management Plan, Flood Risk Management Plan, Sediment Management Plan ready for approval by the Parties to the FASRB, and Summary of Sava Planning Documents shall be submitted in English and all official languages of the Parties. The Summary shall also be printed in 200 copies.

Monthly progress reports shall be submitted in English, in digital format only.

The Project Coordinator is responsible for reviewing and approving all deliverables. Approved reports (Inception, Interim, and Final), along with their deliverables, will serve as the basis for Consultant payments.

6. TEAM COMPOSITION & QUALIFICATION REQUIREMENTS FOR THE CONSULTANT

6.1. Consultant Qualification

1. The Consultant's core business should comprise water resources planning and management, with demonstrated evidence of at least fifteen (15) years of experience in implementing similar types of Assignments including development of relevant planning and strategic documents on national regional or/and transboundary level.
2. The Consultant must provide evidence of at least one (1) successfully completed contracts similar to this Assignment (elated to the development of RBM, FRM and Sediment management plans) in the last seven (7) years, demonstrating a proven record of scope, complexity, and value. References for the listed assignments should be provided.
3. The references should include proven experience in participatory approaches in stakeholder engagement at the regional level.
4. The Consultant must demonstrate solid technical and managerial capabilities of the firm providing only the structure of the organization, general qualifications, and availability of appropriate skills of key experts[7].

Note: The Consultant's team needs to possess adequate proficiency in the official languages of the FASRB Parties to ensure fluid communication and engagement with national entities in the countries of the Sava River Basin during the contract implementation. The shortlisting criteria for the Consultant selection are:

a) Overall experience relevant to the assignment –		*35 points*
b) Similar contracts to demonstrate specific experience –		*50 points*
c) Firm Organization and availability of key experts –		*15 points*
	Total weight:	*100 points*

[7] *No need to provide CVs of key experts. The key and non-key experts will be evaluated at the next stage of the procurement procedure.*

6.2. Team Composition

The Consultant should deploy a well-balanced team of international and local experts possessing the following qualifications, in a specialist position:

Key expert 1: Team Leader

1. Advanced university degree in Water resources management/engineering, Natural resource management, Environmental management, Hydrology, Environmental engineering, or equivalent;
2. Extensive project management experience in international projects related to integrated water management and in leading multidisciplinary technical project teams, including activities of planning, budgeting, and scheduling. Strong project management skills and leadership abilities to ensure the successful implementation of the assignment within specified timelines and budgets. Strong experience in stakeholder engagement on a regional level.
3. At least 10 years and preferably not less than 15 years of demonstrable experience and a proven track record in the implementation of EU water-related policy in the transboundary river basins.
4. Fluency in both written and spoken English.

Key expert 2: Water resource management expert

1. Advanced university degree in Water resources management/engineering, Natural resource management, Environmental management, Hydrology, Environmental engineering, or equivalent;
2. Extensive project management experience in international projects related to integrated water management; Demonstrated expertise in the transposition, implementation, and enforcement of the EU environmental acquis, with a particular focus on the Water Framework Directive (WFD) and Floods Directive (FD) and relevant policies addressing sediment management.
3. At least 10 years and preferably not less than 15 years of demonstrable experience and a proven track record in technical, scientific and socio-economic fields required for the implementation of in particular, the WFD and the FD and other related EU directives.
4. Experience working in the region of the project is an asset.
5. Fluency in both written and spoken English.

Key expert 3: River Basin Management expert

1. Advanced University degree in Water resource engineering/management, Natural resource management, Environmental science/engineering/management, or equivalent.
2. A minimum of ten (10) years of proven, relevant experience in integrated water resource management, water planning or related disciplines, and in regional/international projects related to development of the river basin management plans.
3. Proven experience in service contracts of a similar nature in technical and socio-economic fields required for the implementation of the WFD and other related Directives, in the development and implementation of the RBMPs, preferably in the transboundary context through participatory approaches, and stakeholder engagement at the regional level;
4. Fluency in both written and spoken English.

Key expert 4: Flood Risk Management Expert

1. Qualifications and skills: Advanced university degree in Water resource management/engineering, Hydrology, Water Resources Management, or a related field.
2. A minimum of ten (10) years of proven, relevant experience in flood risk management, modelling, hazard mapping, risk mapping and flood risk management planning, including performing the flood risk assessment, development of the programme of measures, and preparation of the flood mitigation strategies. At least five (5) years of experience in joint activities of Water/Flood Management and Civil Protection Authorities and Forces, particularly in the field of Disaster Risk Management covering all phases, i.e. prevention, protection, preparedness, response and recovery. Involvement in projects with a complex institutional / organizational setting.
3. Proven experience in service contracts of a similar nature in technical and socio-economic fields concerning implementation and/or enforcement of the FD directive and EU Civil protection Mechanism, development of the FRMPs preferably in the transboundary context through participatory approaches, and stakeholder engagement at the regional level. Experience in cross-

border and international cooperation in the field of Natural Disaster Management, particularly on cooperation related to floods (e.g. contingency planning, standard operation procedures, interventions, protection, rescue, relief etc.).

4. Fluency in written and spoken English.

Key expert 5 (sediment/hydrogeomorphology)

1. Advanced university degree (master's or equivalent) in the field of geology, geomorphology, hydrology, environmental science, or civil engineering. An advanced university degree in another discipline may be accepted in lieu if it is pertinent to the requirements of the assignment and in combination with relevant professional experience.
2. A minimum of ten (10) years of proven, relevant experience in hydrogeomorphology, sediment transport, sediment management and water resources management/engineering.
3. Proven experience in service contracts of a similar nature, demonstrating a deep understanding of the complexities associated with sediment-related challenges and should possess extensive knowledge of sediment management-related EU policies and the Water Framework Directive (WFD).
4. Fluency in written and spoken English.

To effectively perform the tasks envisaged by this ToR, the Consultant shall engage a pool of non-key experts who will provide technical support to key experts and who should bring the necessary specialized skills, (e.g.:, water resource management, flood planning, sediment management, groundwater management, pressure/impact/risk on surface and groundwater assessment, biology/ecology, water quality monitoring, climate change, IT, GIS, Economy/Environmental Economy, emergency management, environmental protection, stakeholder engagement/public participation, etc). The selection of non-key experts shall be subject to approval by the Client.

Estimated input per expert

Experts	**Number of days**
KE 1- Team Leader	120
KE2-Water Resource Management Expert	90
KE 3 – River Basin Management Expert	110
KE 4 – Flood Risk Management Expert	85
KE 5-Sediment Management Expert	85
Non-key experts	500
TOTAL	**990**

7. CLIENT'S INPUT AND COUNTERPART PERSONNEL

The work on the assignment will be overseen and coordinated by the ISRBC. The Consultant is exclusively responsible to the ISRBC on all matters related to the Contract.

Additionally, the ISRBC shall make available:

- All documents of interest in electronic form
- All related GIS data in a file geodatabase format
- Existing HEC HMS and HEC RAS models
- Facilitate contact with the stakeholders and assist in the collection and valorization of comments when necessary
- Organize meetings of its relevant expert groups
- Provide support in organizing project events.

Responsible institutions of all participating countries will primarily be involved in project implementation through their representatives in the ISRBC bodies.

The following ISRBC expert groups will be directly involved in the Assignment implementation:

- Permanent Expert Group for River Basin Management (PEG RBM) – leading role;

- Permanent Expert Group for Flood Prevention (PEG FP) – leading role;
- Permanent Expert Group for Navigation (PEG NAV) – consultations;
- Permanent Expert Group for Hydrological and Meteorological Issues (PEG HMI) – consultations;
- Permanent Expert Group for Geographic Information System (PEG GIS) – consultations.

The Consultant shall present the inception, interim, and subsequent project results, and engage in detailed discussions with experts from the Sava countries on the main elements relevant to each plan at the ISRBC's expert group meetings. These groups will review and provide comments, and recommendations for draft deliverables, to be consolidated by the Project Coordinator and deliver to the Consultant. The Consultant may participate in these meetings either in person or online. It is estimated that the ISRBC will organize eight expert group meetings during the assignment.

8. WORKING LANGUAGE

The working language will be English.

9. COMMENCEMENT DATE & PERIOD OF IMPLEMENTATION

The services requested are to be rendered within a maximum of 20 months. The intended commencement date is December 2025, but the actual date will be defined with the Contract signature. The Consultant will perform the services in line with a detailed schedule submitted as part of the proposal, subject to changes during negotiations to accommodate the Client’s comments and requirements.

10. ALIGNMENT WITH THE WORLD BANK STANDARDS

All activities should be performed fully aligned with the provisions of the ESF of the World Bank, and all the underlying Environmental and Social Standards (ESS) under the ESF, in particular, ESS1 on Environmental and Social Impact, ESS6 on Biodiversity, and ESS10 on Stakeholder Engagement. The results of the Assignment should be compared to the ESF, and if gaps are identified, recommendations that include ways to bridge the identified gaps should be provided.

11. SELECTION PROCESS

The Consultant will be selected under the provisions of the World Bank Procurement Regulations for IPF Borrowers (Procurement Regulations), in investment project financing Goods, Works, Non-Consulting and Consulting Services November 2020, based on the method of Quality and Cost Based Selection (QCBS) Lump Sum Contract.