

SAVA

NEWSFLASH



INTERVIEW: BERINA UWIMBABAZI, **The World Bank supports solutions that will** **ensure the sustainable development of the natural** **resources and resilience to increasing climatic shocks**

- Implementation of the Framework Agreement:
The view of Bosnia and Herzegovina
- The development of the 2nd Sava River Basin
Management Plan is coming to an end
- Proposals for limiting the impact of COVID-19 in the Danube Region

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Zoran Milutinović – Lone Bird



DEAR READERS,

It gives me particular pleasure to note that we are issuing this edition of the Sava NewsFlash during the Coronavirus pandemic, which imposes tremendous health impacts worldwide, millions of cases, and a high death toll worldwide at the time of writing.

Alongside these truly horrific health consequences, such as the most severe health crisis in the last 100 years, coronavirus and the policy measures put in place to contain its spread are wreaking havoc upon the global economy.

This combined health and economic shock have also raised significant questions regarding the consequences for the environment and water resources, which thrust environmental and resource economics into the forefront more than has traditionally been the case.

Still, the measures to contain the virus go along with our firm commitment to provide a safe future for the Sava River Basin, its habitats, nature, economy, as well as the implementation of the Framework Agreement, as our prime concern. However, the pandemic forced us to change the nature of our actions in the recent period, so we had to step into the digital world to achieve our goals, which we find, we did pretty successfully.

Taking into account the fact that passenger navigation almost ceased to exist, we are happy to see that cargo transport on the Sava River not only remained the same compared to the previous year but showed the signs of strong vitality along with more than the slight increase in the total amount of goods shipped in that period. Thus the Sava River presented itself as an essential factor in the whole regional transport network.

In the field of navigation, I would also like to point out further progress in the rehabilitation of the most critical fairway sections in Serbia as well as the 11th meeting on the Follow-up of the Joint Statement on Inland Navigation and Environmental Sustainability in the Danube River Basin that was held online from the seat in Zagreb.

Moreover, the 2nd Sava River Basin Management Plan (SRBMP) development is in full swing, while the public consultation will start in autumn 2021.

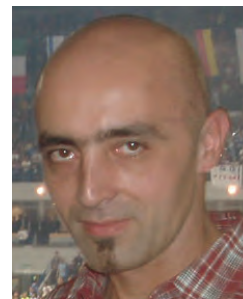
WACOM project (Water Contingency Management in the Sava River Basin) that commenced in the second half of the last year is on the way to become full-fledged, strengthening cross-sectorial interaction between the water management and civil protection administrations. In that regard, local workshops were held in all riparian countries.

Furthermore, you can read the interview with Ms. Berina Uwimbabazi, senior water resources specialist from the World Bank, and get acquainted with her view of the Sava and Drina Rivers Corridors Integrated Development Program financed by the World Bank and the plans for the future.

In this introductory address, among all other activities and events presented in this issue, I would like to stress the celebration of the Sava River Day that was followed by the installation of high water marks at selected locations in the Parties to the Framework Agreement.

This edition of the Sava NewsFlash provides information on the activities mentioned above and other issues of importance for the FASRB implementation. I hope that you will recognize our efforts under challenging circumstances to introduce to you as much as possible new relevant information related to regional water cooperation and navigation and that you will find the time spent with this edition of the Sava NewsFlash quite interesting.

So, I wish you a pleasant reading!



Duško Isaković,

Sava NewsFlash Editor

IMPRESSUM

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Sava NewsFlash is available on ISRBC's web-site at:
www.savacommission.org.

NEWS AND ANNOUNCEMENTS



MEETING OF THE HEADS OF THE SECRETARIATS OF EUROPEAN WATER COMMISSIONS

The ISRBC Secretariat on 30-31 August 2021 hosted traditional Meeting of the Heads of the Secretariats of European Water Commissions. Meeting was attended by Heads of the Secretariats from the International Commission for the Protection of the Danube River, Mr. Ivan Zavadsky, the International Commission for the protection of the Rhine Mr. Marc Daniel Heintz, the International Meuse Commission, Mr. Jean-Noël Pansera, Mr. Bernard Baerends, from the Trilateral Wadden Sea Cooperation and Mr. Leon Dhaene from the International Scheldt Commission.

Part of the meeting was organized in hybrid form, to enable Secretaries from of the International Commission for the Protection of the Odra River against Pollution Mr. Piotr Baranski, Mr. Rüdiger Stempel from the Baltic Marine Environment Protection Commission and Mr. Slavomir Vosika from the Commission for the Protection of the Elbe River to join online. Meeting started with the visit to the Freshwater Aquarium "Aquatika" on the right bank of the Korana River in the city of Karlovac, which provides unique experience and overview of the flora and fauna of Croatia's rivers and their ecosystems.

During the official part of the meeting, Mr. Dragan Zeljko presented the ongoing and prospective activities of the ISRBC. The gathering was addressed by Mr. Eric Tardieu, Secretary General of the International Network of Basin Organizations, Ms. Lucia de Strasser from UNECE Water Convention and Mr. Manfred Seitz from the Danube Commission who shared with the attendees activities and challenges in their fields of work. The meeting was followed by the cruise, on the grain boat "Zora", replica of a wooden boat from the 18th century, showing the beautiful scenery, riches of flora and fauna of the river Kupa.

During the second day of the meeting, held within the premises of the ISRBC in Zagreb, Secretaries in a fruitful discussion, exchanged information, experiences, lessons learnt, the best practices, and ideas about future opportunities and initiatives that can deliver added value to European water commissions in the years to come. The next meeting of the Heads of the Secretariat of European Water Commissions will take place in Ghent, Belgium, after the invitation of Mr. Leon Dhaene, General Secretary of the International Scheldt Commission, which in 2022 celebrate its 20th anniversary.

Rules on the Vessels Navigation Personnel in the Sava River Basin

At its 56th session, the Sava Commission adopted a Decision on Vessels Navigation Personnel in the Sava River Basin with the aim of harmonization of its Rules with the provisions of Directive (EU) 2017/2397 of the European Parliament and the Council on the recognition of professional qualifications in inland navigation, the regulatory framework for inland navigation at European level.

In the forthcoming period, the parties to the Framework Agreement (the Parties) shall adopt the measures necessary to implement this Decision, as this Decision is binding on all Parties. It should be mentioned here that the decision concerned entered into force on April 23, 2021, and that it will be obligatory as of January 18, 2022, and that the Parties will harmonize their respective rules according to it or will directly apply it as part of their regulations in the field of inland navigation.

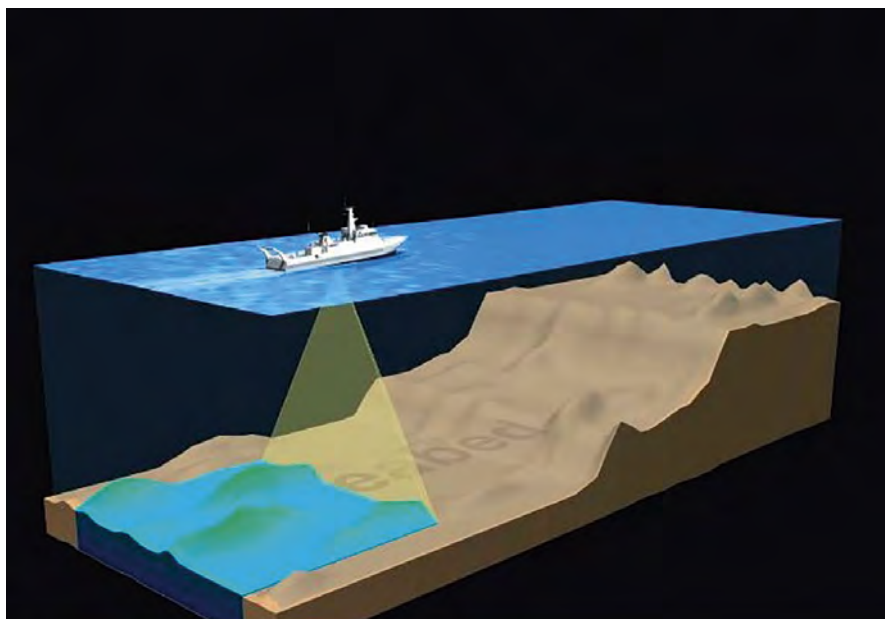
It is important to note that for the first time, in addition to the current navigation personnel, liquefied natural gas experts are included in these Rules, as persons trained to be involved in the fuel supply process of a vessel that uses liquefied natural gas as a fuel or to be boatmasters operating such vessels.

As a new category, for the first time, these rules also include passenger navigation experts as persons working on board and who are professionally trained to take emergency measures on passenger's vessels.

DECISION OF DELIVERY OF RESULTS OF BATHYMETRIC SURVEYS

In October 2018, Flood Forecasting and Warning System in the Sava River Basin (Sava FFWS), developed in coordination with the International Sava River Basin Commission, was handed over to the riparian countries. With some adjustments/improvements to individual elements and through an extension adapted to the navigation needs, it could be used to predict high water levels at which navigation is suspended and to predict low water levels that could also hinder navigation.

Taking into account the capabilities of the Sava FFWS and the associated hydraulic HEC-RAS model for the main course of the Sava River, which provides simulated and forecasted water levels, the Sava Commission Secretariat analyzed the need to upgrade HEC-RAS model and identified the need for regular updating of the cross-section profiles of the Sava River within this model, in order to increase the accuracy of water level prediction results and the



benefits that shipping and other waterway users might have.

For this reason, and with the support of expert groups of the Sava Commission, it was concluded that the data on bathymetric surveys of the Sava riverbed and its navigable tributaries should be collected regularly and, if possible, the hydraulic model of the Sava would be regularly updated to ensure its applicability in all conditions of water regime. Therefore, the Sava Commission, at the proposal of the

Permanent Expert Group for Navigation, at its 56th session, held on March 23-24, 2021, adopted Decision 9/21 on regular delivery of results of bathymetric surveys of the Sava River and its tributaries to the Sava Commission.

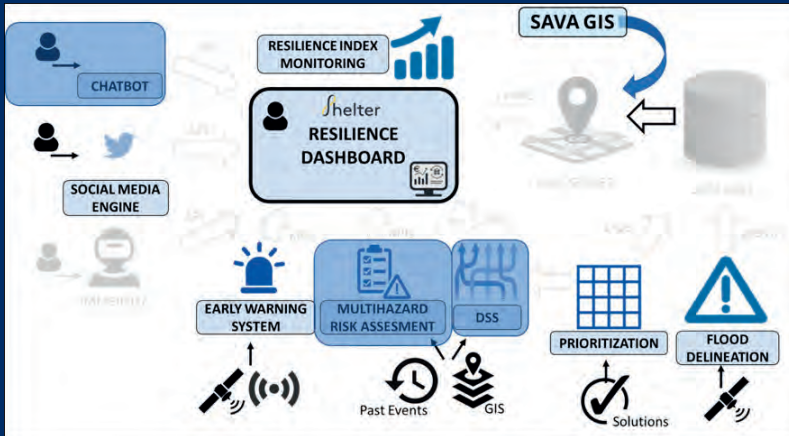
The main goal of this decision is to update the HEC-RAS model to accurately forecast primarily low water levels on critical sections of the waterway, which will significantly contribute to navigation safety and help shipowners in vessel loading planning.

OUTLINE OF SEDIMENT MANAGEMENT PLAN FOR THE SAVA RIVER BASIN



Parties to the FASRB ratified a Protocol on Sediment Management, which entered into force in October 2017. Intending to fulfill the Protocol's goals, the Parties have obliged to cooperate in developing and implementing a joint Sediment Management Plan. Accordingly, with the financial support of the UNESCO Venice Office, the Sava Commission started the project entitled Outline of Sediment Management Plan, which will provide an analysis of existing sediment management practices in the Sava River Basin and define further steps for the development of full-fledged Sediment Management Plan for the Sava River Basin. The project started in July 2021 and will end in December 2022.

NEWS AND ANNOUNCEMENTS



4th SHELTER'S WORKSHOP

CO-CREATING TOOLS FOR BETTER FLOOD RISK RESPONSE

The 5th workshop planned for December 2021 will test the pilot version of the SHELTER tools

The 4th workshop within the SHELTER project was convened virtually on June 8, 2021 by the Sava Commission and the UNESCO Venice Office.

Stakeholders as well as target national groups, 33 in total from 21 institutions, came together to brainstorm ideas on how to improve SHELTER tools under development. The workshop aimed at defining user's perspective on the main functionalities and properties developed for the Multi-Hazard Risk Assessment and Decision Support System and the Chatbot, tools which are currently in the first phase of their development. Once ready, these tools would be utilized in the Dashboard that will enable users to better manage risks on cultural heritage across Europe, and specifically

the management of flood risks in the Sava River Basin. Recommendations received during the workshop will be integrated into the design and structure of the SHELTER tools under development.

Along to the project objectives, stakeholders discussed specific issues on the data gathering about cultural heritage in flood-prone areas and integration under Sava GIS, as well as conducting flood impact analyses on the heritage sites in the Sava River Basin.

The 5th workshop planned for December 2021 will test the pilot version of the SHELTER tools, as well as improved functionalities of Sava GIS, which will be developed further in accordance with the feedback received during this workshop.

Sava Youth Parliament

As part of the 9th Sava Youth Parliament organization, the Sava Commission has announced a competition for high school students and youth aged 19 to 25 on the topic "Let's protect our cultural heritage", which refers to the protection of cultural heritage from the increasingly frequent and intense floods that occur because of climate change. The competition is open until September 22, 2021. Eight teams of secondary school students (two per Sava country) and two teams of young people aged 19 to 25 whose works are selected as the best, will be invited to participate at the Sava Youth Parliament, whose main event will be held on October 8-9, 2021 in Banja Luka.



SLUDGE MANAGEMENT

As a part of the cooperation within Priority Area 4 (Water Quality) of the Danube Strategy, the World Bank, ICPDR, and the Sava Commission held on June 10, 2021, an online workshop on sludge management in the Danube region for a greener EU. So far, it has been found that the problem of sludge management should be addressed at the national level. However, recent events in some Sava countries showed that cross-border cooperation in this field could also improve the possibilities for achieving the good ecological status of waters in international basins. The workshop aimed to start a discussion on wastewater sludge management and paved the way for more detailed policy and technological dialogue on this issue

PRO DANUBE CHALLENGING 2020
FOR INLAND WATER TRANSPORT

PROPOSALS FOR LIMITING THE IMPACT OF COVID-19 IN THE DANUBE REGION



Despite some drops in transported volumes, the year 2020 was not as dramatic as expected for cargo transportation

Pro Danube initiates and executes transnational EU-funded projects related to the development of IWT in the Danube Region. Since its establishment a decade ago, Pro Danube has continued to grow, becoming a well-established network of more than 200 companies, which have a strategic interest in securing better infrastructure conditions and a higher rate of public investments in the Danube transport and logistics system. Serving its members as a competence center for EU grants accession, consultancy, and project management, Pro Danube successfully brought together public and private entities in establishing enduring partnerships, which have a lasting impact on the development of IWT far beyond the limited lifespan of EU funded projects. Having a unified voice that represents the interest of the Danube IWT sector is, therefore, especially in times of crisis, of utmost importance for both industry and public authorities responsible for the governance of IWT.

has thrown the whole transportation system into a never-before-seen level of uncertainty. The governmental restrictions introduced in response to the pandemic have caused disruptions severely affecting ports, shipping, transport, and supply chains. All economic indicators, as well as the feedback received by Pro Danube from the industry, point to significant challenges for the IWT sector.

Both cargo and passenger transportation were heavily affected, with the latter coming to a complete standstill. Despite some drops in transported volumes, the year 2020 was not as dramatic as expected for cargo transportation. Based on extensive research activities of Pro Danube, transported volumes of petrochemical, chemical, and agricultural products, as well as minerals and ores, decreased in Q1 - Q3 2020, depending on region up to 30%. The agricultural sector was the only one to give signs of recovery in the fourth quarter of 2020. This year's first quarter was characterized by adequate nautical conditions and a strong market, while the

second quarter is affected by a drop in volumes and the deterioration of freight rates.

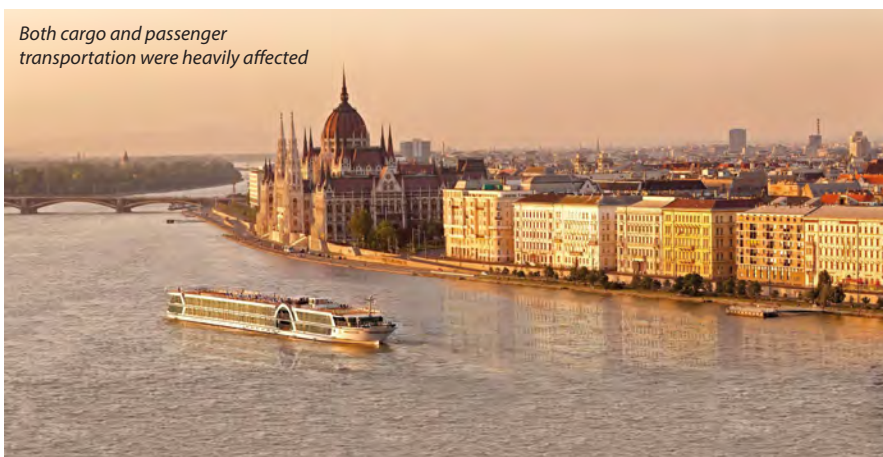
In its capacity as a gateway between the public and private sector, Pro Danube has made several proposals to limit the pandemic's impact on the businesses operating on the Danube and its navigable tributaries:

- **Uniform regulations for the exchange of crew members:** the exchange of crew members on trans-national voyages should be eased respecting health safety requirements.
- **Keep border control locations as in regular conditions:** administrative procedures should be enacted in a way to support and not constrain the transportation process on the Danube.
- **Europe-wide harmonized approach for the cruising and shipping industry:** Europe-wide accepted and implemented guideline that proposes measures to limit the harmful economic effects on IWT businesses.
- **Other short & midterm proposals** include the waiver of port/channel fees for a limited period, whereas terminal investments should be adequately financed to accelerate loading times, increase efficiency, and secure 24/7 – on-demand operations. Finally, financial instruments to support the adaptation to the new EU legislative requirements should be made accessible.

More information on Pro Danube International and becoming a member can be found on the www.prodanube.eu website.

Robert Rafael,
Pro Danube International

Both cargo and passenger transportation were heavily affected



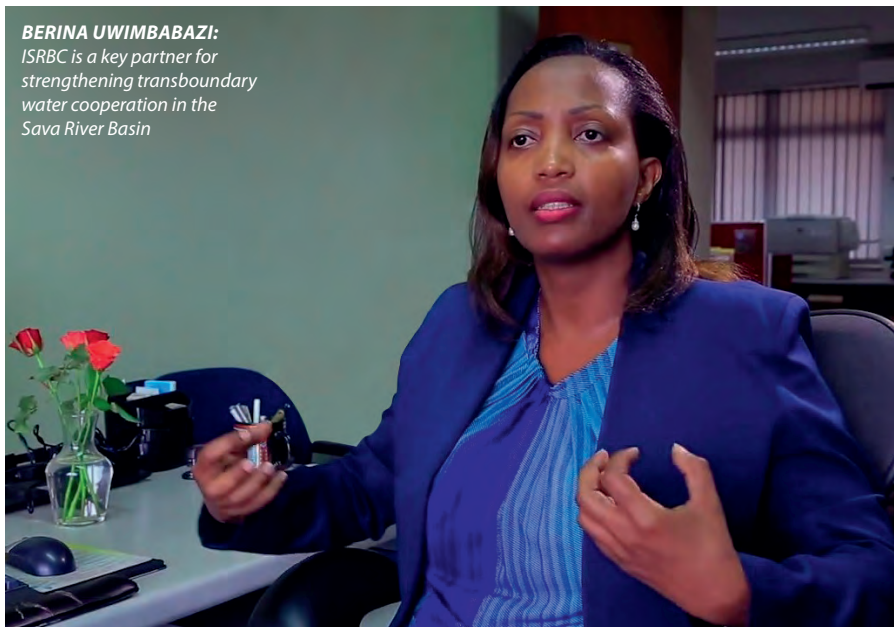
INTERVIEW BERINA UWIMBABAZI,
SENIOR WATER RESOURCES SPECIALIST AT WORLD BANK GROUP

THE WORLD BANK SUPPORTS SOLUTIONS THAT WILL ENSURE THE SUSTAINABLE DEVELOPMENT OF THE NATURAL RESOURCES AND RESILIENCE TO INCREASING CLIMATIC SHOCKS

The Sava Commission is a strong and mature river basin organization that is strongly supported by the Riparian members. The ISRBC is well positioned to continually play a key role in supporting transboundary water cooperation and will remain a key partner in this regard

How would you explain the role of the WB in promoting sustainable development of the Sava River Basin region in water management, flood protection, and navigation, as well as WB's role in the Sava and Drina Rivers Corridors Integrated Development Program (SDIP) in particular?

The role of the WB in partnership with all Riparian States of the Sava River Basin is to identify key policy and investment solutions that will ensure sustainable development of the shared natural resources while building resilience to increasing climatic shocks. This can be achieved by convening key stakeholder platforms to harness transboundary water cooperation, strengthening institutions and infrastructure – and these are some of the key pillars of the SDIP. Priority activities were identified



BERINA UWIMBABAZI:
ISRBC is a key partner for strengthening transboundary water cooperation in the Sava River Basin

in consultation with the Riparian States for implementation during Phase I, with the sole objective of strengthening transboundary water cooperation and improving navigability and flood protection in the Sava and Drina Rivers Corridors.

Can you please describe the challenges and needs of the Sava riparian countries, which are addressed within the SDIP?

Despite tangible accomplishments by ISRBC and the FASRB signatories, the continued need for improvement in water management among Sava-Drina riparian

countries demonstrates the challenge of further deepening regional coordination on shared natural resources. For example, the increasing effects of climatic shocks such as floods know no boundaries, and as such related negative impacts are experienced across borders in all States. The SDIP, therefore, seeks to promote and strengthen integrated transboundary water cooperation that will provide the platform for improved knowledge sharing, joint decision making, monitoring systems, resilient institutions, and infrastructure. This will be achieved through key priority interventions identified not only at the national level but very importantly at the regional level – these could be interventions that will be implemented

Improved navigability and restoration activities could increase opportunity for promoting ecotourism



jointly while strengthening regional early warning systems e.g. the flood forecasting system at the ISRBC.

An important part of the SDIP is dedicated to the integrated river basin management and planning within these river corridors. What do you think should be the priority in this regard?

The first priority, should be to undertake comprehensive stakeholder consultations at all levels during the development process; and secondly integration of climate change and the risks therein, this will ensure that appropriate mitigation and adaptation measures are identified in support of sustainable development of these shared natural resources.

The most important tangible achievement should be improvement in flood and drought protection in the area. Can you tell us, what time it would take to see visible progress?

It is important to note that, whatever measures – structural or nonstructural – that the Riparian States will undertake will take time to demonstrate impact such as flood and drought protection, so none can give a definite time or timeframe for visible progress. However, the SDIP is designed for a period of 10 years after which there will be some indicative visible progress that will continue to get stronger over time. It is also important to note that all Riparian States have already initiated some of these

Building resilient infrastructure is indeed already a priority for all Riparian States because of the increasing occurrence of extreme climatic events that have already occurred over recent years and remain a risk to development

elements of transboundary cooperation as is evidence in the ISRBC's mandate and ongoing activities, and the SDIP will only continue to build on this.

The work on expanding the navigability of the Sava and Drina Rivers along with the development of tourist capacities along these rivers is mentioned at a later stage?

Yes, this is envisaged to happen at a later stage because of some of the prerequisite activities that need to be undertaken such as the demining of the Sava River right bank in BiH, as well as the completion of the Regional Tourism Master Plan to be developed through the ISRBC. It is envisaged

that, cleaning up of the right bank in BiH will enable improved navigability and restoration activities, which could also increase opportunities for promoting ecotourism.

It is said that the development of infrastructure capable of withstanding extreme weather events related to climate change will soon become a priority for states and global institutions. How will these issues be addressed in the SDIP?

Building resilient infrastructure is indeed already a priority for all Riparian States because of the increasing occurrence of extreme climatic events that have already occurred over recent years and remain a risk to development. Building on the negative impacts of recent extreme events such as flash floods, e.g. 2014 floods, Riparians have developed Flood Risk Management Plans, which also identify priority activities some of which have been implemented to date. During Phase I of the SDIP, Riparians will continue to build resilient infrastructure, especially for flood protection, as well as identify remaining or emerging priorities from updated flood risk and river basin management plan that will be implemented during Phase II of the SDIP.



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Milan Bobić – Before the Rain



The World Bank is coming in to support this process further, not only with technical and financial resources, but importantly with global knowledge and experiences from other countries and River Basins

How could you assess the cooperation of the World Bank and the ISRBC, so far? How do you find the ISRBC could contribute to the successful implementation of the SDIP goals?



The ISRBC is a strong and mature river basin organization that is strongly supported by the Riparian members. This is evidence of strong commitment and support for transboundary water cooperation by the Riparian States, aspects that will enable the ISRBC to contribute immensely to the implementation and eventual achievement of results for the SDIP. This is partly because the ISRBC is uniquely positioned to provide a trusted platform for confidence and trust building for all key stakeholders in the region, which will ensure strong ownership of SDIP interventions and the sustainability of the respective objectives.

How do you see future cooperation and the role of the ISRBC, in the context of the preparedness of countries in the region, to jointly address cross-border issues?

As mentioned above, the ISRBC is well positioned to continually play a key role in supporting transboundary water

cooperation and will remain a key partner in this regard. The SDIP was designed to run through two Phases, with Phase I envisaged to support confidence building for transboundary water cooperation while implementing a few priority interventions for flood protection and preparing integrated investments that will be jointly implemented by the Riparians during Phase II. So, in a way, the successful implementation of the SDIP Phase I will also affirm the countries' preparedness to jointly address transboundary issues.

It is important to note that, the Riparians together with the ISRBC has already initiated this transboundary cooperation and the WB is coming in to further support this process with not only technical and financial resources but importantly global knowledge and experiences from other countries and River Basins.
(Marko Barišić)

COOPERATION CELEBRATION OF THE RIVER SAVA DAY IN 2021

INSTALLATION OF HIGH WATER MARKS IN ALL FOUR COUNTRIES

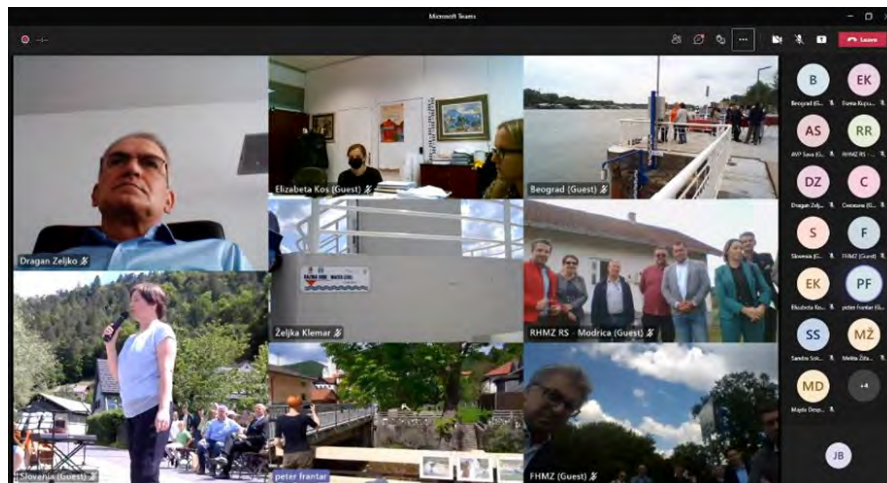
Marks were placed at selected locations visible to the public to raise awareness of the importance of the Sava River for all segments of life

The River Sava Day, whose basin is one of the most diverse and best-preserved river systems in Europe, is celebrated on the 1st of June in four countries in the Sava River Basin - Slovenia, Croatia, Bosnia and Herzegovina, and Serbia.

Parties to the Framework Agreement on the Sava River Basin declared the 1st of June the Sava River Day at the First Meeting of the States Parties (held on the 1st of June, 2007, in Zagreb). Since then, the Sava River Day has been celebrated throughout the basin every year to promote the importance of the Sava River for all countries in the basin, its high ecological values, and socio-economic potentials.

By organizing various activities, in particular attention is drawn to the vital role that the Sava River and its tributaries play in the population's life in its basin and related public awareness of the importance of the cross-border cooperation and agreement on primary forms of water use and protection in the Sava River Basin.

For that purpose, in previous years, the Sava Commission organized photo competitions, bicycle tours from the source to the mouth of the Sava River, and similar events. In 2010,



it was organized the signing of the Protocol on Flood Protection with the Framework Agreement on the Sava River Basin within the Sava Day celebration.

This year, in cooperation with the Hydrometeorological Services of the States Parties to the FASRB, the Sava Commission organized the installation of high water marks at selected locations in all four countries, with live coverage from all meeting points. In Slovenia, the mark was placed in Polhov Gradac on the bridge on 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, while in Serbia, the high water mark was placed in the Sava port in Belgrade.

High water level marks were placed in selected locations visible to the public to raise awareness of the importance of the

Sava River for all segments of life, the need for water protection, and preservation of the environment and cultural heritage of the Sava region. It is crucial because the Sava River, and particularly floods, can cause significant damage. Naturally, such situations are not desirable, but the relevant services and the entire citizenry must be well prepared and act accordingly when they happen. The appropriate measurement and monitoring of water levels will significantly contribute to that.

High waters, i.e., high water levels, are also a warning that the maintenance of the embankment and restoration of the waterway should be performed constantly and thoroughly because the rivers are of great economic and tourist potential. According to the people who live on its shores, the Sava River has always given more than it has taken, so caring for it and defending it from the harmful effects of high waters is the obligation of all generations, and placing these signs is a contribution to achieving that.

In addition to the online coverage from all locations, the Sava Day was also covered by the media in the Parties, on Croatian Radio and Television (HRT) and Radio Television of Republika Srpska.



Duško Isaković,
Samo Grošelj,
ISRBC Secretariat

STANCE IMPLEMENTATION OF THE FRAMEWORK AGREEMENT ON THE SAVA RIVER:
THE VIEW OF BOSNIA AND HERZEGOVINA

INVESTING IN THE FURTHER IMPROVEMENT OF THE WATERWAY IS ESSENTIAL FOR THE REGION'S DEVELOPMENT

The potential of the Sava River is enormous. Flood protection remains a top priority, and the active support of all actors is necessary

Construction of a new bridge
across the Sava River near
Gradiška, June 2021



We could not have influenced the consequences of the junction of the Sava Dolinka and the Sava Bohinjka, and we could not have influenced the river's flow that would occur later, just as we could not have influenced the formation of its beautiful confluence in Belgrade.

Rivers Krka, Bosut, Drina, Vrbas, Lonja, Bosna, Kupa, Ukrina, Kolubara, Una still contribute to one of the longest rivers in Europe. Winding its course through four countries, it eventually led to establishing the Sava Commission, which would be in charge of the care for the common good.

In all strategic documents of the countries in the Sava River Basin, the same commitments can be found today through the development component that the Sava River waterway may achieve. However, all of this does not leave us much space to relax.

This no easy task set in front of the Sava Commission and other established joint bodies is being successfully overcome, and joint commitment is close to the final realization.

The Sava River waterway is being restored and improved from year to year. The corridor through which this river directly connects several cities does not leave a single moment for a break. At the same time, the development of transport infrastructure in other modes of transport is also being carried out. Intermodality is closer than ever.

Awareness of the importance of the Sava River waterway in Bosnia and Herzegovina

946 kilometers of cooperation, trust, innovation and development as a warrant of economic progress

and its institutions has not risen to an enviable level yet.

The share in the international basin of 39.25% requires from the competent institutions in Bosnia and Herzegovina total commitment to the implementation of the objectives of the Framework Agreement.

It is estimated that Una, Vrbas, Ukrina, Bosna and Drina together bring 1149 m³ of water per second into the Sava, which accounts for 68% of the discharge of the Sava at its confluence with the Danube.

Navigation, transport capacity, waterway width, water level, river information system, ice, docks, depth, shoal are some of the terms that give headaches to all those who are trying to improve the Sava River waterway.

"Taming" a river like this is not an easy task, and the potential of this river is enormous. That is why investing in the further improvement of the waterway is essential for the region's development.

Flood protection remains a top priority, and the active support of all actors is necessary. The integrated development of the Sava and Drina corridors, as one of the World Bank-financed projects aimed at strengthening cross-border cooperation through water resources management and improving waterway navigability and flood protection, is just one proof of the general commitment to future development and understanding of

The integrated development of the Sava and Drina corridors is just one proof of the general commitment to future development and understanding of the importance of economic potential of the Sava River

the importance of economic potential of the Sava River. That is why one of the main tasks in Bosnia and Herzegovina is developing capacities, which will positively use this potential.

Finally, after a long time, demining the right bank of the Sava River as the first precondition for any activity on the Sava River has become a practical priority issue. It is the main obstacle to further infrastructure development in this area and is expected to commence soon, to achieve the final goal - the right bank of the Sava River without mines.

The reconstruction of the Port of Brcko finally began in June 2021, with the support of the European Union and the EBRD. Following the reconstruction, the port might become a central link for the region's economies.

With the development of the economy and inclusion in international economic flows, the use of the port can be expected to intensify in the future, particularly within the system of integrated transport.

Since the "Port of Brcko" is located almost in the center of the town, it is connected to the road and railway network. However, they set certain restrictions for the full and uninterrupted use of the port.

There is a plan to build the missing infrastructure in the "Port of Brčko", such as a transshipment plateau and relocation of the existing and construction of a new industrial railway from the railway station to the port.

One hundred thirty thousand four hundred two tons of cargo were transhipped in the Port of Brčko in 2019, while the available port capacities were used less than 25%.

It was similar in 2020. In order to solve the key problems in water transport, the following topics are found essential: the restoration of the riverbed distinguishes intending to advance the possibilities of using class IV vessels upstream from Brčko, the establishment of a fully functional river information services, restoration and construction of infrastructure facilities in the Port of Brcko, including railway connection in Brcko.

What is especially interesting is the interest in the construction of new ports. Intermodal ports on the Sava River certainly have perspective and economic justification.

The Sava Commission remains the main instrument for achieving the goals set by the FASRB, to which Bosnia and Herzegovina give full support. The Secretariat of the Sava Commission has proved that, in addition to all challenges, it can fulfill the tasks, while the progress in all areas of competence of the Secretariat is apparent.

Cooperation, trust, innovation, and development are the features of an organized system, and economic progress with a high awareness of environmental protection has been achieved due to this successful international cooperation.



*Sava River near the bridge
Brčko - Gunja, June 2021*

Zoran Andrić,
Member to the Sava
Commission
from Bosnia and
Herzegovina



ACTIVITIES THE IMPROVEMENT OF THE STATUS OF ALL WATERS AND THE COLLABORATION TOWARDS LONG-TERM SUSTAINABLE USE OF WATER RESOURCES

THE DEVELOPMENT OF THE 2nd SAVA RIVER BASIN MANAGEMENT PLAN IS COMING TO AN END

It is planned to be accepted at the 9th Meeting of the Parties to the FASRB in autumn 2022.

Following the Framework Agreement on the Sava River Basin (FASRB), the unique international agreement which integrates many aspects of water resources management, the signatory parties Slovenia, Croatia, Bosnia and Herzegovina, and Yugoslavia (subsequently Serbia and Montenegro, and then Serbia expressed their determination to cooperate in line with the Water Framework Directive (60/2000/EC) (WFD), to make all efforts towards implementation of the WFD on the national level and the shared international river basins and to develop and cooperate in preparatory activities related to the development of the joint and/or integrated water resources management Plan for the Sava River Basin. Furthermore, the cooperation with Montenegro was established based on the Memorandum of Understanding signed in 2013.

The implementation of the EU WFD in the Sava River Basin started with developing the 1st Sava River Basin Analysis (SRBA) in line with the requirements from Article 5 and Article 6 of EU WFD. Quantitative and qualitative properties of the waters of the Sava River and its main tributaries were analyzed within the SRBA. In addition, hydrology and hydromorphology reports were prepared while integration issues of water management with the flood risk management and navigation development sectors were addressed as well. The ISRBC accepted the SRBA Report in September 2009 as a sound basis for further activities on developing the Sava River Basin Management Plan (SRBMP).

The activities on developing the 1st Sava River Basin Management Plan started in 2009,

following the methodology and processes applied at the Danube River Basin level, with a higher level of details, applying more stringent criteria for the Sava River and its main tributaries. In addition, there were established several integrative principles for water management, including the integration of economic approaches and aims for the integration of water protection into other policy areas. After the public consultation process, the Parties to the FASRB approved the 1st SRBMP at their Fifth Meeting held in Zagreb (Republic of Croatia) on December 2, 2014.

The process of the implementation of the EU WFD continued with the development of the 2nd Sava River Basin Analysis as an update of the first one as of 2009. It was finalized in 2016 and accepted by ISRBC in June 2017. In parallel, the report on significant water management issues with the interim overview of the implementation of measures was prepared, setting out key issues affecting the water environment in the Sava River Basin. Both documents represented key steps towards the preparation of the 2nd Sava RBMP.

Following the WFD requirement, which stipulates that RBMPs are subjected to the revision every six years, the preparation of

the 2nd SRBMP started in 2018, intending to enhance the existing basin-wide policy framework for the prevention of further deterioration or/and improvement of the status of all waters and protected areas, as well as strengthening the collaboration towards long-term and sustainable use of the water resources within the Sava River Basin. It is currently in the process of finalization.

The 2nd SRBMP aims to represent the basis for basin-wide integrated, technically, environmentally, and economically sound and sustainable water management, thus describing the current status within the basin and measures planned to be implemented to meet the set objectives. The structure of the 2nd SRBMP follows the outline of the 1st SRBMP and comprises chapters related to general characteristics of the Sava River Basin, updated assessment of significant anthropogenic pressures on the surface and groundwater resources, provides the compilation of national monitoring networks for both surface and groundwater bodies of interest for the basin-wide planning and preliminary inventory of areas protected under EU and national legislations. Furthermore, the 2nd SRBMP provides a comprehensive assessment of the ecological status/potential and chemical status of

Surface Water Bodies	296
Ground Water Bodies	60
Agglomerations with >2.000 PE	431
Agglomerations with Waste Water Treatment	133
Significant Industrial Polluters	168
River Longitudinal Continuity Interruptions	33
Surface Water Bodies in Good Ecological Status/Potential or Above	68
Surface Water Bodies in Good Chemical Status	159
Ground Water Bodies in Good Chemical Status	36
Ground Water Bodies in Good Quantitative Status	42
Protected Areas >100 ha	519

FIGURE 1: 2nd SRBMP basic figures-preliminary results

MAP 13: Urban wastewater discharges – Reference year 2016 - draft



This product is based on national information provided by the Parties to the FASRB (SI, HR, BA, RS) and ME. The borders between the countries cooperating in preparation of the Sava River Basin Analysis have not been finally determined. The content and maps of this report do not prejudice the determination or demarcation of the borders in any way.

2ND SAVA RIVER BASIN MANAGEMENT PLAN
Processed and compiled by the Secretariat of the ISRBC, May 2021

FIGURE 2: Significant pressures analysis-Urban wastewater discharges-Draft map

surface water bodies and groundwater bodies' chemical and quantitative status. It includes an overview of the environmental/management objectives and the list of existing exemptions for surface and groundwater bodies. The 2nd SRBMP addresses the water management integration issues, such as navigation, flood risk management, hydropower production, and agricultural sectors development of significant importance for the Sava River Basin. An economic analysis of significant uses of water and water services in the transboundary context of the Sava River Basin is being prepared along with the development of a comprehensive Program of measures for the next planning cycle in order to specify the activities required to meet the WFD objectives, defined for the Sava River Basin through visions and specific objectives for each issue of importance for water management.

The preparation of the 2nd SRBMP is based on the official national data and information provided by the members of the ISRBC Permanent Expert Group for

River Basin Management and Permanent Expert Group for GIS. The ISRBC Secretariat coordinates the process of the 2nd SRBMP preparation.

At the time of the preparation of the 2nd SRBMP, in the finalization phase are as follows: 3rd national RBMPs in Slovenia and Croatia, 2nd RBMPs for the Sava River Basin in Bosnia and Herzegovina (in SRB in Federation, Republic of Srpska and District Brčko) and 1st national RBMPs for Serbia and Montenegro.

At the time of preparation of the second SRBMP, national river basin management plans for the third planning cycle in Slovenia and Croatia are being finalized, as well as for the second planning period for the Sava River Basin in Bosnia and Herzegovina (in the Federation, Republika Srpska and Brčko District). In addition, preparation of the first national plans is underway in Serbia and Montenegro.

As an outcome of the challenging planning process, significant is an advancement on a national and transboundary level regarding compliance with the WFD requirements. However, numerous gaps and uncertainties are recognized as essential, and various issues in the transboundary context remain significant, defining clear guidance for the future planning cycles.

Considering the essential importance of the ensured broad stakeholder involvement and encouraged public participation for the successful river basin management and planning, the public consultation phase for the 2nd SRBMP will be pursued in autumn 2021. Following the prospective comments, the modified SRBMP is expected to be adopted by the Sava Commission in spring 2022. It is to be accepted at the 9th Meeting of the Parties to the FASRB to be held in autumn 2022.

Jovana Rašeta Bastić,
Samo Grošelj,
ISRBC Secretariat

PROJECT AN IMPORTANT STEP TOWARDS EFFECTIVE EMERGENCY MANAGEMENT IN THE SAVA RIVER BASIN

WACOM WILL REDUCE RISKS INDUCED BY ACCIDENTAL POLLUTION AND FLOODS

This project, which is implemented with the financial support of the EU fund, started on the 1st of July 2020 and will end on the 31st of December 2022

Transboundary prevention of floods and incidents

Recognizing the vital importance of transboundary cooperation, the Parties of the Framework Agreement on the Sava River Basin (SI, HR, RS, and BA) should undertake measures to prevent or limit hazards and reduce and eliminate adverse consequences of floods and incidents involving substances to water. Due to climate change, it is expected that more frequent and more intense extreme weather events will take place more often, such as tragic floods in May 2014, when intensive precipitation caused flash floods, erosion, and landslides along small watercourses and disastrous flooding of the Sava River and its tributaries. Also, the occurrence of accidental pollution is notable, with the most recent accidental pollution occurred

in BA (Spreča River in 2018) and SI (Rižana River in 2019). These events are the main challenges for the WACOM project, which is implemented with the financial support of the EU fund (EDRF, IPA).

The main objective of the WACOM is a reduction of environmental risks

The project's main objective is to reduce environmental risks related to accidental pollution and floods, with transboundary impact in Sava River Basin. The project started on the 1st of July 2020 and will end on the 31st of December 2022. In the first year of the implementation, most activities focused on WP 1 (Explore and define joint preparedness and response) and WP 2 (Development of joint preparedness and response toolbox).

WP 1. Explore and define joint preparedness and response

The process of mapping institutions, procedures, and activities was carried out within three areas – civil protection, water management, and river navigation – at different levels (strategic, tactical, and operational) with a particular interest in

existing procedures in force. The entire mapping process was conducted in a highly dynamic environment to meet multiple functions to follow the project's initial project assumptions and examine the current situation. It also served as a gap analysis to identify specific areas where it is necessary to change and/or create new procedures and as a basis for the organization and implementation of the first four national workshops in May/June 2021. They were conducted very successfully, given the fact that they were planned during a time when the COVID-19 pandemic was at its peak. At the introductory part, the WACOM project and the most significant activities of the International Sava River Basin Commission were presented. The central part was made up of two blocks. Analyzes national systems of institutions, procedures, and activities were presented in the first block, while the Incident Command System was presented in the second part. In addition to the WACOM project partners, the workshop was attended by a significant number of representatives of target groups. They all recognized the significance and importance of this project and confirmed the correct direction of action

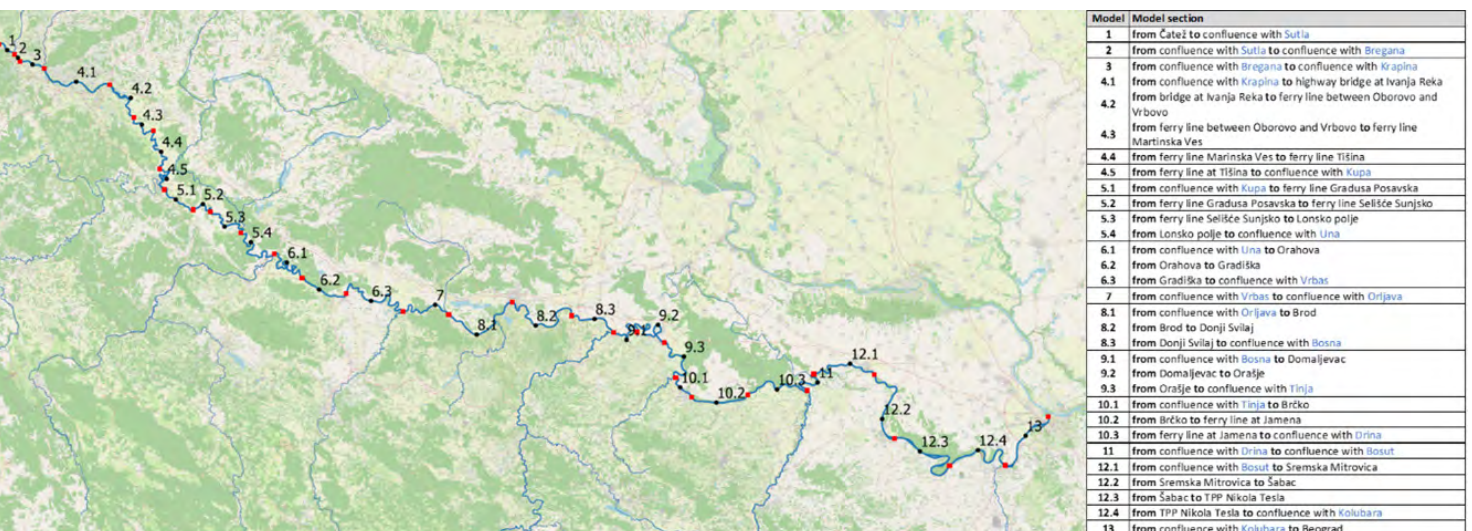


FIGURE 1: The extent of the modeling area and modeling sections



FIGURE 2: An example of a model mesh with the underlying terrain grid

in the project with their contribution and comments.

WP T2 modeling component enabling modeling of oil spill propagation

The main goal of the WP T2 is the development of a rapid joint preparedness and response toolbox, which will be built up in a harmonized way with the operational family of tools used by the Sava Commission, i.e., Geoinformation System (Sava GIS), Hydrological Information System (Sava HIS) and Flood Forecasting and Warning System in the Sava River Basin (Sava FFWS). The modeling module will be based on two-dimensional (2D) hydraulic and oil spill propagation modeling.

Therefore, the first major task within WP2 has been the development of local 2D hydraulic models. It has been conducted for an approximately 700 km long section of the River Sava, from Čatež in Slovenia to Belgrade in Serbia. For Slovenia, propagation models had already been developed in the previous project financed by the URSZR.

In the second step, the river reaches have been further divided into shorter modeling sections, with the model limits being set at natural boundaries (e.g., river confluence) or relevant infrastructure (e.g., ferry line, harbor, etc.), as shown in Figure 1.

The 2D hydraulic modeling has been

performed using the RiverFlow2D model, a combined hydrologic and hydraulic model with a mobile bed and pollutant transport finite volume model for rivers, estuaries, and floodplains. It can route floods in rivers and simulate inundation over floodplains and complex terrain at high resolution and remarkable speed, stability, and accuracy. The 2D hydraulic models are based on a flexible mesh system, where the model domain is represented by a network of triangular elements that form a connected mesh. The current model mesh sizes have been selected, providing an adequate level of resolution while allowing model simulations to be performed in a reasonable timescale on an available computer configuration. An example of the 2D computational mesh can be seen in Figure 2.

In the following stages of hydraulic modeling, the focus will be on running the models for different ranges of low discharge flows and potential model refinements through the model calibration/validation processes.

In addition, testing and selecting an appropriate oil spill model have already been conducted based on the pre-calculated hydraulics of an individual river section, which enables the simple development of different oil spill scenarios and faster oil spill model runs. The analysis has already been

published in a respected scientific journal and is freely available on the journal's website (<https://doi.org/10.3390/w13121620>).

Reducing risks of pollution and floods by strengthening sectoral cooperation among institutions

The first two work packages are the basis for verification of the joint preparedness and response at the pilot sites (WP T3), and the development of the Strategy for the implementation of coordinated preparedness and response will be developed (WP T4). This will ensure that project would not end in December 2022. We hope that the result of the WACOM will be reduced risks induced by accidental pollution and floods by strengthening the transnational and trans sectoral cooperation among institutions managing the flood and accidental floods pollution preparedness and response stage.

More information on the project is available on WACOM DTP website (<http://www.interreg-danube.eu/approved-projects/wacom>), Facebook (<https://www.facebook.com/WACOMSavaRiverBasin/>), and Twitter (<https://twitter.com/WacomSrb>).

Dr. Primož Banovec,
University of Ljubljana
Dr. Robert Mikac,
AZUR

COMPETENCY PROGRAM FOR THE IMPROVEMENT OF THE EDUCATION AND TRAINING SYSTEM FOR ACQUIRING TITLES IN INLAND NAVIGATION



BY IMPLEMENTING THE NEW EU DIRECTIVE QUALIFICATIONS OF SHIPPERS ARE RECOGNIZED THROUGHOUT THE UNION

All certificates of competency, official shipping books and logbooks comply with the Directive, holders of such qualifications may pursue their profession on all inland waterways of the Union

Based on previous researches undertaken by the Faculty of Transport and Traffic Sciences, it is expected that the required number of shippers will increase in the long run. On the one hand, the number of smaller ships is expected to decline, requiring a smaller number of shippers. However, the number of larger vessels will increase. As these vessels are even more labor-intensive, the demand for qualified personnel in inland navigation is expected to increase accordingly. On the other hand, due to the growing demand for transportation in the future, more

qualified personnel in inland navigation will be needed. As a result, a sharp increase in cargo in traffic on inland waterways (in tonne-kilometers) is expected. The number of available human resources is expected to decline in the long run due to aging, creating a gap between the required and available skilled shippers.

The implementation of the Directive is crucial for facilitating and encouraging mobility and labor in the inland navigation sector by ensuring that the qualifications of shippers are recognized throughout the Union. The recognition of professional qualifications in inland navigation has changed radically with the entry into force of this new Directive. The adopted Directive 2017/2397 repeals Directive 91/672/EEC and Directive 96/50/EC provide the gradual introduction of transitional measures. This new Directive contains many more extensive legal obligations than Directive 91/672 / EEC and Directive

96/50 / EC, particularly considering that and the fact that Directive 2017/2397 includes provisions of many qualifications that the legal framework has not required so far, i.e., non-master crew members, experts for the use of LNG as a fuel, as well as the experts in passenger navigation. From the point of view of the requirements in terms of increased employability of crew members throughout the Union, it is necessary, when implementing the Directive, that all certificates of competency, official shipping books (service record book), and logbooks comply with the Directive.

Consequently, holders of such qualifications may pursue their profession on all inland waterways of the Union. In addition to the need to organize examinations, it is also necessary to evaluate the competencies required for navigation on certain sections of the inland waterway with special risks and necessary means to prove that these

requirements are met. The analysis of the inland navigation market, market trends, even in the conditions of the whole of 2020 under the influence of the COVID-19 pandemic, showed a steady trend of increasing needs and interest for professional staff in the inland navigation sector. Therefore, all competencies from the CESNI standardized competencies must be integrated into all approved education and training programs aimed at crew members at the operational and management level in implementing EU Directive 2017/2397 within the education and/or training system. This is necessary to ensure that education and training programs are based on competencies that must be recognized at the EU level.

The new reformed competency-based education and training system will include all requirements for the certification of the staff as crew members. This new system will be subject to regular review by CESNI expert groups to maintain and guarantee a high level of safety in inland navigation and monitor the development of new technologies with a view to incorporating new technologies and new skills in the future. The demand for skilled labor is based on competencies that will increase the security and mobility of the labor force and the need for a modern system of education and training. Applicants completing education and training in accordance with the new EU Directive 2017/2397 on the recognition of professional qualifications in inland navigation and CESNI competence standards will receive a Union Certificate of Qualifications, which allows them to work throughout the European Union. Transposition of Directive (EU) 2017/2397 of the European Parliament and the Council on recognizing professional qualifications in inland navigation and repealing Council Directives 91/672 / EEC and 96/50 / EC from the national law is an essential stage in the implementation of European law.

Directives must be transposed into national policy in order to have the impact of EU law. By providing common Union-wide standards necessary for achieving the internal market for the employees in the inland navigation sector, this EU Directive simplifies the legal framework related to

professional qualifications in the European inland navigation sector. The Directive provisions minimize the administrative burden for those candidates who have completed an approved training program, avoiding unnecessary passing of additional administrative examinations. Competence standards must be applied during the development/revision of inland navigation and training programs to meet the requirements of EU Directive 2017/2397 related to crew members' level of knowledge and skills. The Directive is one of the legal instruments available to the European institutions to implement European Union policy. The EU institutions, therefore, adopt it in accordance with the founding treaties. Once adopted at the EU level, EU countries transpose it into their regulations. The competent certification institution should approve simulators used for competence assessment. Approval should be issued upon request when demonstrated that the simulator meets the CESNI standards for simulators.

The first and most crucial guideline and recommendation for the improvement and modernization of the process of education and training in inland navigation is the revision of the translation of the Directive and the revision of the translation of the CESNI standard. The recommendation

is to establish the possibility of distance education and training as a form of learning and teaching in which there is no physical presence, but the process takes place in a virtual environment with the support of digital technologies. This need came to the fore in the current situation of the COVID-19 pandemic. In order to successfully plan the process of distance education and training in selecting the most appropriate implementation system, specific tool, or content, it is necessary to know their main features. All the same, it is necessary to adapt the content to online performance, particularly the part of the content that can be performed remotely and the organization of occasional video conferencing meetings with participants. Furthermore, existing teaching materials should be supplemented and modernized in accordance with CESNI standards. This is not a recommendation but an obligation. Given the scope and complexity of this process, it is necessary that institutions/centers planning to conduct training, education, and training, immediately commence work on additions and changes to the teaching material. It is indispensable to prepare materials for the managerial and operational levels.

Natalija Kavran,
Faculty of Transport and
Traffic Sciences in Zagreb





Interreg



EUROPEAN UNION

Danube Transnational Programme

WACOM

Water Contingency Management in the Sava River Basin



Photo: Hvala lože



Knowing upstream preparedness and response mechanisms improves the efficiency and effectiveness of the preparedness and response downstream!



University of Ljubljana



REPUBLIKA HRVATSKA
Ministarstvo mora,
prometa i infrastrukture



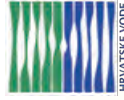
JAROSLAV ČERNI
WATER INSTITUTE



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA OKOLJE IN PROSTOR
DIREKCIJA REPUBLIKE SLOVENIJE ZA VODE



INTERNATIONAL SAVA RIVER BASIN COMMISSION



HRVATSKE VODE



Vlada Republike Srbije
Republička uprava civilne zaštite

AZUR

Project duration: July 2020 - December 2022



WACOM Sava River Basin



@WacomSrb

Project co-funded by European Union (EDRF, IPA)

SAVSKI VJESNIK



INTERVJU: BERINA UWIMBABAZI, Svjetska banka podržava rješenja koja će osigurati održivi razvoj prirodnih resursa i otpornost na sve veće klimatske šokove

- Implementacija Okvirnog sporazuma:
Pogled Bosne i Hercegovine
- Bliži se završetku izrada drugog Plana upravljanja
slivom rijeke Save
- Prijedlozi za ograničavanje uticaja COVID-19 u Dunavskoj regiji

SADRŽAJ

3	Uvodnik
4	Vijesti i najave
7	Prijedlozi za ograničavanje uticaja COVID-19 u Dunavskoj regiji
8	Intervju – Berina Uwimbabazi, visoki stručnjak za vodne resurse u Svjetskoj banci <i>Svjetska banka podržava rješenja koja će osigurati održivi razvoj prirodnih resursa i otpornost na sve veće klimatske šokove</i>
11	Proslava Dana rijeke Save 2021. - Simbolično postavljene oznake visokih voda u sve četiri zemlje
12	Implementacija Okvirnog sporazuma – pogled Bosne i Hercegovine: <i>Ulaganje u dalje unapređenje plovnog puta od suštinskog je značaja za razvoj regiona</i>
14	Bliži se završetku izrada drugog Plana upravljanja slivom rijeke Save
16	Projekat WACOM će smanjiti rizike izazvane slučajnim zagađenjem i poplavama
18	Program unapređenja sistema obrazovanja i osposobljavanja za sticanje zvanja u unutrašnjoj plovidbi
20	WACOM poster

Zoran Milutinović – Usamljena ptica



DRAGI ČITAOCI,

Posebno mi je zadovoljstvo napomenuti da ovo izdanje Savskog Vjesnika objavljujemo tokom pandemije koronavirusa, koja nameće ogromne zdravstvene posljedice širom svijeta, milione slučajeva i veliki broj smrtnih slučajeva u vrijeme pisanja ovog uvodnika.

Pored ovih zaista užasnih zdravstvenih posljedica, poput najteže zdravstvene krize u posljednjih 100 godina, koronavirus i političke mjere koje su uvedene kako bi se spriječilo njegovo širenje nanose štetu globalnoj ekonomiji.

Ovaj kombinirani zdravstveni i ekonomski šok takođe je pokrenuo značajna pitanja u vezi sa posljedicama po okoliš i vodne resurse, koji su ekologiju i ekonomiju resursa izbacili u prvi plan, više nego što je to tradicionalno bio slučaj.

Ipak, mjere za suzbijanje virusa idu zajedno sa našim čvrstim opredjeljenjem da osiguramo sigurnu budućnost za sliv rijeke Save, njegova staništa, prirodu, ekonomiju, kao i implementaciju Okvirnog sporazuma, kao našu primarnu brigu. Međutim, pandemija nas je primorala da u posljednje vrijeme promijenimo prirodu svojih akcija, pa smo morali da zakoračimo u digitalni svijet kako bi postigli svoje ciljeve, što nam je, smatramo, prilično uspješno.

Uzimajući u obzir činjenicu da je putnička plovidba skoro prestala postojati, sretni smo što vidimo da je teretni transport rijekom Savom ne samo ostao isti u odnosu na prethodnu godinu, već je pokazao znakove snažne vitalnosti uz više nego blagi porast ukupnih količina robe pretovarenih u tom periodu. Tako se rijeka Sava predstavila kao bitan faktor u cjelokupnoj regionalnoj transportnoj mreži.

U oblasti plovidbe, takođe bih želio da istaknem dalji napredak u uređenju najkritičnijih dionica plovnog puta u Srbiji, kao i 11. sastanak o nastavku Zajedničke izjave o unutrašnjoj plovidbi i okolišnoj održivosti u slivu rijeke Dunav, koji je održan na internet platformi, iz sjedišta u Zagrebu.

Štoviše, razvoj 2. Plana upravljanja slivom rijeke Save (SRBMP) u punom je zamahu, dok će javne rasprave započeti na jesen 2021. godine.

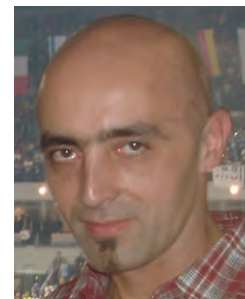
Projekt WACOM (Upravljanje vanrednim situacijama u slivu rijeke Save) koji je započeo u drugoj polovini prošle godine, na putu je da se u potpunosti razvije, jačajući međusektorsku interakciju između uprava za upravljanje vodama i uprava civilne zaštite. S tim u vezi, lokalne radionice su održane u svim priobalnim zemljama.

Nadalje, možete pročitati intervju sa gospođom Berinom Uvimbabazi, visokim stručnjakom za vodne resurse iz Svjetske banke, i upoznati se sa njenim viđenjem Programa integriranog razvoja koridora Save i Drine koji finansira Svjetska banka, kao i planovima za budućnost.

U ovom uvodnom obraćanju, između ostalih aktivnosti i događaja predstavljenih u ovom broju, želio bih naglasiti proslavu Dana rijeke Save nakon koje je uslijedilo postavljanje oznaka visoke vode na odabranim lokacijama u Stranama Okvirnog sporazuma.

Ovo izdanje Savskog vjesnika pruža informacije o gore navedenim aktivnostima i drugim pitanjima od značaja za implementaciju Okvirnog sporazuma. Nadam se da ćete prepoznati naše napore, pod izazovnim okolnostima, da Vam predstavimo što je moguće više novih relevantnih informacija vezanih za regionalnu saradnju u oblasti voda i plovidbe i da će vam vrijeme provedeno uz ovo izdanje Savskog vjesnika biti zanimljivo.

Dakle, želim vam prijatno čitanje!



Duško Isaković,

Urednik Savskog vjesnika

IMPRESSUM

Izdavač:

Međunarodna komisija za sliv rijeke Save; Zagreb, Kneza Branimira 29
Tel./Faks: +385 1 488 6960, 488 6986; E-pošta: isrbc@savacommission.org

Izvršni urednik: Duško Isaković

Pomoćnik urednika: Marko Barišić

Uređivački odbor: Meliha Lepara (BA), Ivana Plepel (HR),

Olivera Janković (RS), Barbara Potočnik (SI)

Dizajn i štampa: Optimum dizajn d.o.o.

Savski vjesnik je službeni bilten Međunarodne komisije za sliv rijeke Save (Savske komisije) koji se objavljuje dvaput godišnje u formi dvojezičnog izdanja – na engleskom jeziku i jednom od službenih jezika Savske komisije, za svako izdanje. Njegova svrha je prikaz najznačajnijih aktivnosti, projekata i rezultata postignutih u oblastima obuhvaćenim *Okvirnim sporazumom o slivu rijeke Save*, pružanje korisnih informacija i mogućnosti za bolju komunikaciju zainteresiranih strana i šire javnosti sa Savskom komisijom i, na taj način, promocija izuzetnih vrijednosti i potencijala sliva rijeke Save.

Savski vjesnik je dostupan i na internet stranici Savske komisije:

www.savacommission.org.

VIJESTI I NAJAVE



SASTANAK ČELNIKA SEKRETARIJATA EVROPSKIH KOMISIJA ZA VODE

Sekretariat Savske komisije je 30. i 31. avgusta 2021. godine bio domaćin tradicionalnog sastanka čelnika sekretarijata Evropskih komisija za vode. Sastanku su prisustvovali čelnici sekretarijata Međunarodne komisije za zaštitu rijeke Dunav, g. Ivan Zavadski, Međunarodne komisija za zaštitu Rajne g. Marc Daniel Heintz, Međunarodne komisije za rijeku Mozal g. Jean-Noel Pansera, zatim g. Bernard Baerends iz Trilateralne komisije za saradnju u Vadeskom moru i g. Leon Dhaene iz Međunarodne komisije za rijeku Scheldt.

Dio sastanka je organiziran u hibridnom obliku, kako bi se omogućilo da se pridruže na mreži g-dinu Piotru Branskom, sekretaru Međunarodne komisije za zaštitu od zagađenja rijeke Odre, g-dinu Rudigeru Strepelu, sekretaru Komisije za zaštitu morskog okoliša Baltika i g-dinu Slavomiru Vosiki, sekretaru Komisije za zaštitu rijeke Labe. Sastanak je započeo posjetom slatkovodnom akvarijumu „Akuatika“ na desnoj obali rijeke Korane u gradu Karlovcu, koji pruža jedinstveno iskustvo i pogled na floru i faunu hrvatskih rijeka i njihovih ekosistema.

Tokom službenog dijela sastanka, g-din Dragan Zeljko je predstavio tekuće i buduće aktivnosti Savske komisije. Okupljenima su se obratili g-din Eric Tardieu, generalni sekretar Međunarodne mreže organizacija riječnih slivova, gđa Lucia de Strasser iz UNECE Konvencije o vodama i g-din Manfred Seitz iz Dunavske komisije koji su sa prisutnima podijelili aktivnosti i izazove u području rada. Nakon sastanka uslijedilo je krstarenje žitnom lađom "Zora", koji predstavlja repliku drvenog broda iz 18. vijeka, sa kojeg su se ukazivali prekrasni krajolici, bogatstvo flore i faune rijeke Kupe.

Tokom drugog dana sastanka, koji je održan u prostorijama Savske komisije u Zagrebu, sekretari su u plodnoj diskusiji razmijenili informacije, iskustva, naučene lekcije, najbolje prakse i ideje o budućim mogućnostima i inicijativama koje mogu pružiti dodatnu vrijednost evropskim komisijama za vode u narednim godinama. Sljedeći sastanak šefova Sekretarijata evropskih komisija za vode će se održati u Gentu, u Belgiji, na poziv gospodina Leona Dhaenea, generalnog sekretara Međunarodne komisije za rijeku Scheldt, koja 2022. godine slavi 20. godišnjicu postojanja.

Pravila o posadi plovila u slivu rijeke Save

Savska komisija je na svojoj 56. sjednici donijela Odluku o usvajanju Pravila o posadi plovila u slivu rijeke Save s ciljem usklađivanja svojih pravila sa odredbama Direktive (EU) 2017/2397 Evropskog parlamenta i Vijeća o priznavanju stručnih kvalifikacija u unutrašnjoj plovidbi kao rezultat potrebe za ujednačavanjem regulatornog okvira unutrašnje plovidbe na evropskom nivou.

U narednom periodu, strane Okvirnoga sporazuma (Strane) će donijeti mjere neophodne za provođenje ove Odluke budući da je ova odluka obavezujuća za sve Strane. Ovdje treba spomenuti da je navedena odluka stupila na snagu 23. aprila 2021. godine, a da će se primjenjivati od 18. januara 2022. te da će Strane prema njoj uskladiti svoja odgovarajuća pravila ili će je direktno primjenjivati kao dio svoje regulative u području unutrašnje plovidbe.

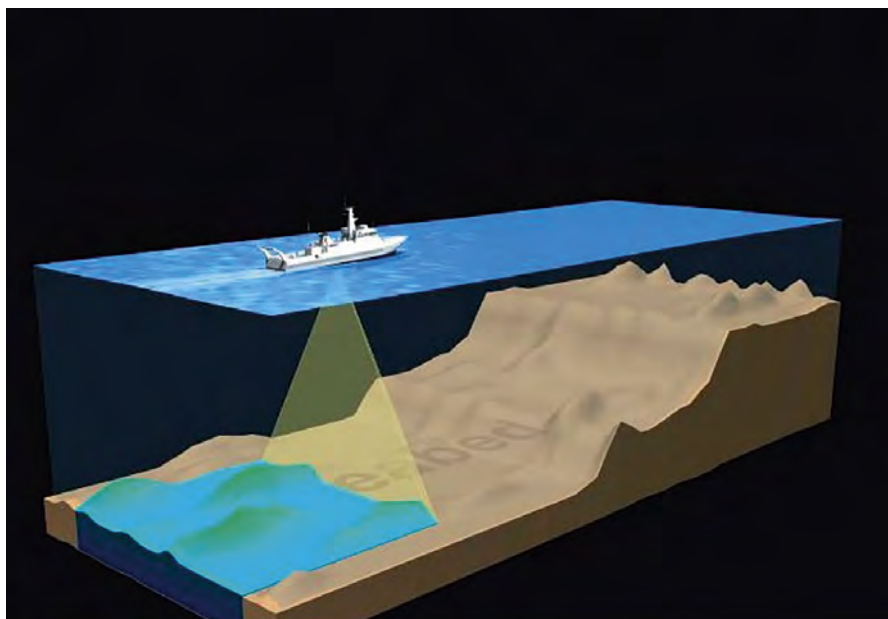
Važno je ovdje napomenuti da su po prvi put pored dosadašnjih članova posade u ova Pravila uvršteni i stručnjaci za ukapljeni prirodni plin kao osobe osposobljene da budu uključene u postupak opskrbe gorivom plovnog objekta koji kao gorivo koristi ukapljeni prirodni plin ili da budu zapovjednici koji upravljaju takvim plovnim objektima.

Kao nova kategorija, u ova pravila su također po prvi put uvršteni i stručnjaci za putničku plovidbu kao osobe koje rade na plovilu i koje su stručno osposobljene za poduzimanje mjera u vanrednim situacijama na putničkim plovilima.

ODLUKA O DOSTAVLJANJU REZULTATA BATIMETRIJSKIH SNIMANJA

U oktobru 2018. godine pribrežnim zemljama Save predat je Sistem za predviđanje i upozoravanje na poplave u slivu rijeke Save (Sava FFWS), koji je razvijen uz koordinaciju Međunarodne komisije za sliv rijeke Save. Uz izvjesna prilagođenja / poboljšanja pojedinih elemenata i kroz proširenje prilagođeno za potrebe plovidbe, on bi mogao poslužiti za predviđanje visokih vodostaja na kojima se zaustavlja plovidba, kao i za predviđanje niskih vodostaja koji bi takođe mogli ometati plovidbu.

Uzimajući u obzir mogućnosti Sistema za predviđanje i upozoravanje na poplave u slivu rijeke Save (Sava FFWS) i s njim povezanog hidrauličkog HEC-RAS modela za glavni tok rijeke Save pomoću koga se daju simulirani i prognozirani vodostaji, Sekretarijat Savske komisije analizirao je potrebe za nadogradnjom HEC-RAS modela i identificirao potrebu za redovnim ažuriranjem poprečnih profila rijeke Save unutar ovog modela, kako



bi se povećala tačnost rezultata predviđanja vodostaja i koristi koje bi mogli imati brodarstvo i drugi korisnici plovinih puteva.

Iz tog razloga, a uz podršku stručnih grupa Savske komisije, zaključeno je da se na redovnoj osnovi prikupljaju podaci batimetrijskih snimanja korita Save i njenih plovinih pritoka i, po mogućnosti, vrši regularno ažuriranje hidrauličkog modela Save i time osigura njegova primjenjivost u svim uslovima vodnog režima. Stoga je Savska

komisija, na prijedlog Stalne stručne grupe za plovidbu, na svojoj 56. sjednici održanoj 23.-24.03.2021., donijela Odluku br. 9/21 o dostavi rezultata batimetrijskih snimanja rijeke Save i njenih pritoka Savskoj komisiji.

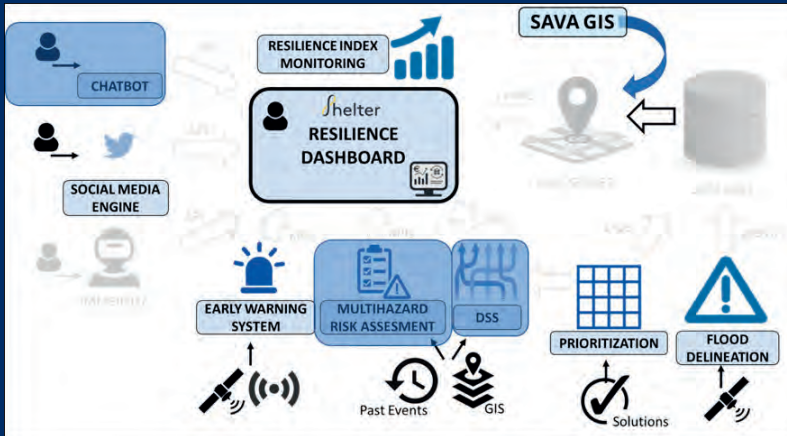
Osnovni cilj ove odluke je ažuriranje HEC-RAS modela kako bi se što tačnije prognozirali prvenstveno niski vodostaji na kritičnim dionicama plovniog puta što će u velikoj mjeri doprinijeti sigurnosti plovidbe, a isto tako pomoći brodarima pri planiranju krcanja plovila.

NACRT PLANA UPRAVLJANJA NANOSOM ZA SLIV RIJEKE SAVE



Strane Okvirnog sporazuma (FASRB) ratifikovale su Protokol o upravljanju nanosom, koji je stupio na snagu u oktobru 2017. godine. U cilju ispunjavanja ciljeva Protokola, Strane su preuzele obavezu da sarađuju u razvoju i implementaciji zajedničkog Plana upravljanja nanosom. Uz finansijsku podršku UNESCO kancelarije u Veneciji, Savska komisija pokrenula je projekat pod naslovom Nacrt Plana upravljanja nanosom koji treba da pruži analizu postojećih praksi upravljanja nanosom u slivu rijeke Save i odredi dalje korake za izradu sveobuhvatnog Plana upravljanja nanosom za sliv rijeke Save. Projekat je započet u julu 2021., a završiće se u decembru 2022. godine.

VIJESTI I NAJAVE



4. SHELTER RADIONICA

ZAJEDNIČKI RAZVOJ ALATA ZA BOLJI ODGOVOR NA RIZIK OD POPLAVA

*Peta radionica planirana za decembar 2021.
testiraće pilot verziju SHELTER alata*

Četvrtu radionicu u okviru projekta SHELTER su 8. juna 2021. virtuelno sazvali Savska komisija i UNESCO-ova Kancelarija u Veneciji.

Zainteresirane strane, kao i ciljne nacionalne grupe, ukupno 33 učesnika iz 21 institucije, okupili se kako bi razmijenili ideje o tome kako poboljšati alate SHELTER koji su u razvoju. Radionica je imala za cilj definirati korisničke poglede o glavnim funkcionalnostima i svojstvima koja su razvijena za Procjenu rizika od višestrukih opasnosti, Sistem za podršku u odlučivanju i Chatbot, alate koji su trenutno u prvoj fazi svog razvoja. Kad budu spremni, ovi alati će se koristiti kroz Dashboard, kontrolnu ploču koja će korisnicima omogućiti bolje upravljanje rizicima po kulturno

naslijeđe širom Evrope, a posebno upravljanje rizicima od poplava u slivu rijeke Save. Preporuke zaprimljene tokom radionice kroz daljnji razvoje biće integrirane u dizajn i strukturu SHELTER alata.

Uz ciljeve projekta, interesne grupe su raspravljale i o specifičnim pitanjima vezanim za prikupljanje podataka o kulturnom naslijeđu u područjima izloženim poplavama i integraciji u okviru Sava GIS-a, kao i provođenju analiza uticaja poplava na naslijeđe u slivu rijeke Save.

Peta radionica planirana za decembar 2021. testiraće pilot verziju SHELTER alata, kao i poboljšane funkcionalnosti Sava GIS -a, koji će se dalje razvijati u skladu s povratnim informacijama primljenim tokom ove radionice.

Parlament mladih

U okviru organizacije 9. Parlamenta mladih, Savska komisija raspisala je konkurs za srednjoškolce i omladinu uzrasta od 19 do 25 godina na temu „Zaštitimo svoje kulturno naslijeđe“ koji se odnosi na zaštitu kulturnog naslijeđa od sve češćih i intenzivnijih poplava koje se javljaju usljed klimatskih promjena. Konkurs je otvoren do 22. septembra 2021. Osam timova učenika srednjih škola (po dva iz Savskih država) i dva tima mladih uzrasta od 19 do 25 godina, čiji radovi budu izabrani kao najbolji, biće pozvani da učestvuju na Parlamentu mladih, čiji će centralni događaj biti održan 8-9. oktobra 2021. godine u Banjaluci.



UPRAVLJANJE MULJEM

10. juna 2021. godine, u okviru saradnje unutar Prioritetne oblasti 4 (Kvalitet vode) Dunavske strategije, Svjetske banke, ICPDR-a i Savske komisije, održana je online radionica o upravljanju muljem u Dunavskom regionu za zeleniju EU. Do sada se smatralo da se problemom upravljanja muljem treba baviti na nacionalnom nivou. Ali nedavni događaji u nekim od savskih zemalja pokazuju da bi i u ovoj oblasti prekogranična saradnja mogla da poboljša mogućnosti za postizanje dobrog ekološkog statusa voda u međunarodnim slivovima. Radionica je imala za cilj započinjanje diskusije o upravljanju muljem otpadnih voda i otvorila je put ka detaljnijoj politici i tehnološkom dijalogu o ovom pitanju.

PRO DANUBE IZAZOVNA 2020.
ZA UNUTRAŠNJI VODNI TRANSPORT

PRIJEDLOZI ZA OGRANIČAVANJE UTICAJA COVID-19 U DUNAVSKOJ REGIJI



Uprkos nekoliko padova u obimu preveženog tereta, 2020. godina nije bila toliko dramatična kao što se očekivalo za prevoz tereta

Pro Danube pokreće i izvodi transnacionalne projekte koje financira EU, a odnose se na razvoj unutrašnjeg vodnog transporta u Dunavskoj regiji. Od svog osnivanja, deceniju unazad, Pro Danube i dalje raste, postavši dobro organizovana mreža sa više od 200 kompanija koje imaju strateški interes da osiguraju bolje infrastrukturne uvjete i veću stopu javnih investicija u transportni i logistički sistem na Dunavu. Služeći svojim članovima kao centar kompetentan za pristup grantovima EU, za konsultacije i upravljanje projektima, Pro Danube je uspješno okupio javne i privatne entitete u uspostavljanju trajnih partnerstava koja imaju trajan uticaj na razvoj unutrašnjeg vodnog transporta, daleko iznad ograničenog trajanja projekata koje financira EU. Imati jedinstveni glas koji zastupa interes unutrašnjeg vodnog transporta na Dunavu je stoga, posebno u kriznim vremenima, od najveće važnosti i za industriju i za javne vlasti odgovorne za upravljanje unutrašnjim vodnim transportom.

2020. godina ostaće upamćena kao godina koja je kompletan transportni

sistem bacila na nikada ranije viđeni nivo neizvjesnosti. Ograničenja vlada, uvedena kao odgovor na pandemiju, prouzrokovala su poremećaje koji su ozbiljno uticali na luke, brodarstvo, transport i lance snabdijevanja. Svi ekonomski pokazatelji, kao i povratne informacije koje je Pro Danube dobio od industrije, ukazuju na značajne izazove za sektor unutrašnjeg vodnog transporta.

I teretni i putnički prevoz bili su teško pogođeni, pri čemu je potonji došao u potpuni zastoj. Uprkos nekoliko padova u obimu preveženog tereta, 2020. godina nije bila toliko dramatična kao što se očekivalo za prevoz tereta. Na osnovu opsežnih istraživačkih aktivnosti Pro Danube, prevežene količine petrohemijskih, hemijskih i poljoprivrednih proizvoda, kao i minerala i ruda smanjile su se od prvog do trećeg kvartala 2020., u zavisnosti od regije i do 30%. Poljoprivredni sektor jedini je davao znake oporavka u četvrtom kvartalu 2020. Prvi godišnji kvartal odlikovali su adekvatni plovidbeni uvjeti i snažno tržište, dok je na drugi kvartal uticao pad obima i pogoršanje cijena tereta.

U svojstvu stvaranja konekcija između javnog i privatnog sektora, Pro Danube je podnio nekoliko prijedloga za ograničavanje uticaja pandemije na kompanije koje posluju na Dunavu i njegovim plovim pritokama:

- **Jedinstveni propisi za smjenu članova posade:** smjenu članova posade na međunarodnim putovanjima treba olakšati poštujući zahtjeve zdravstvene sigurnosti.
- **Lokacije granične kontrole održavati kao u redovnim uvjetima:** administrativne procedure trebaju biti donijete na način da podržavaju, a ne da ograničavaju proces transporta na Dunavu.
- **Usaglašeni pristup na nivou Evrope za industriju krstarenja i brodarstvo:** Prihvaćena i primijenjena smjernica na nivou Evrope koja predlaže mjere za ograničavanje štetnih ekonomskih efekata na kompanije koje posluju u unutrašnjem vodnom transportu.
- **Ostali kratkoročni i srednjoročni prijedlozi** uključuju odricanje od lučkih / kanalskih naknada na ograničen period, dok bi investicije u terminale trebalo adekvatno financirati kako bi se ubrzalo vrijeme utovara, povećala efikasnost i osiguralo poslovanje 24/7 po zahtjevu. Konačno, finansijski instrumenti koji podržavaju prilagođavanje novim zakonodavnim zahtjevima EU trebaju biti dostupni.

Više informacija o Pro Danube International i kako postati član te organizacije možete pronaći na internet stranici www.prodanube.eu.

Robert Rafael,
Pro Danube International

I teretni i putnički prevoz bili su teško pogođeni



INTERVJU BERINA UWIMBABAZI,
VISOKI STRUČNJAK ZA VODNE RESURSE U SVJETSKOJ BANCII

SVJETSKA BANKA PODRŽAVA RJEŠENJA KOJA ĆE OSIGURATI ODRŽIVI RAZVOJ PRIRODNIH RESURSA I OTPORNOST NA SVE VEĆE KLIMATSKE ŠOKOVE

Savska komisija je snažna i ozbiljna riječna organizacija koju snažno podržavaju priobalne članice. U dobroj je poziciji da stalno igra ključnu ulogu u pružanju podrške prekograničnoj saradnji u oblasti voda i u tom pogledu ostat će ključni partner

Kako biste objasnili ulogu Svjetske banke u promociji održivog razvoja područja sliva rijeke Save u upravljanju vodama, zaštiti od poplava i u plovidbi, kao i ulogu Svjetske banke u Programu integrisanog razvoja Koridora rijeke Save i Drine (Projekt)?

Uloga Svjetske banke u partnerstvu sa svim državama iz sliva rijeke Save je identificirati ključna politička i investiciona rješenja koja će osigurati održivi razvoj zajedničkih prirodnih resursa uz izgradnju otpornosti na sve veće klimatske šokove. To se može postići sazivanjem platformi ključnih zainteresovanih strana radi iskorištavanja prekogranične saradnje u oblasti voda, jačanja institucija i infrastrukture - a to su neki od ključnih stubova Projekta. Prioritetne aktivnosti utvrđene su u konsultacijama sa državama iz sliva za implementaciju tokom Faze I, s jedinim ciljem, jačanjem prekogranične saradnje u oblasti voda i poboljšanjem plovnosti i zaštite od poplava na koridorima rijeke Save i Drine.

Poboljšana plovnost i aktivnosti na obnovi mogli bi povećati mogućnosti za promociju ekoturizma

BERINA UWIMBABAZI:
Savska komisija je ključni partner za jačanje prekogranične saradnje u oblasti voda u slivu rijeke Save



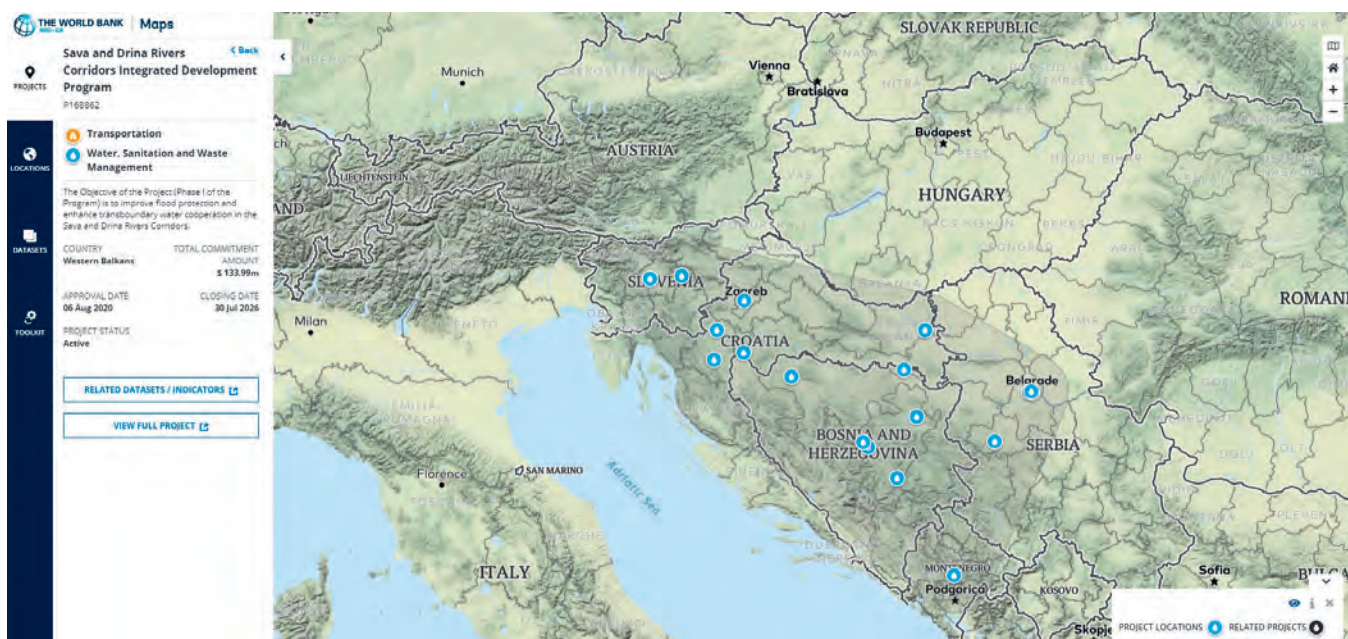
Možete li, molim Vas, opisati izazove i potrebe zemalja iz sliva rijeke Save, koji se rješavaju u okviru Projekta?

Uprkos opipljivim postignućima Savske komisije i potpisnica Okvirnog sporazuma, stalna potreba za poboljšanjem upravljanja u vodoprivredi između zemalja iz sliva Save i Drine pokazuje izazov daljeg produbljivanja regionalne koordinacije na upravljanju zajedničkim prirodnim resursima. Na primjer, sve veći uticaji klimatskih šokovi poput poplava, ne poznaju granice i kao takvi, negativno povezani uticaji se dešavaju preko granica u svim državama. Stoga Projekt nastoji promovisati i jačati integrisanu prekograničnu saradnju u oblasti voda koja će pružiti platformu za bolju

razmjenu znanja, zajedničko donošenje odluka, monitoring sisteme, snažne institucije i infrastrukturu. To će se postići ključnim prioritetnim intervencijama koje su identifikovane ne samo na nacionalnom već, što je vrlo važno, na regionalnom nivou - to bi mogle biti intervencije koje će se provoditi zajedno uz jačanje regionalnih sistema ranog upozoravanja, npr. sistem za prognozu poplava pri Savskoj komisiji.

Važan dio Projekta posvećen je integrisanom upravljanju riječnim slivom i planiranju unutar ovih riječnih koridora. Šta mislite da bi, u tom pogledu, trebalo biti prioritet?

Prvi prioritet bi trebalo biti sprovođenje sveobuhvatnih konsultacija sa zainteresovanim stranama na svim nivoima tokom procesa izrade; i drugo, integracija



klimatskih promjena i rizika u njima, čime će se osigurati identificiranje odgovarajućih mjera ublažavanja i prilagođavanja u cilju podrške održivom razvoju ovih zajedničkih prirodnih resursa.

Najvažnije opipljivo postignuće trebalo bi biti poboljšanje zaštite od poplava i suša u regionu. Možete li nam reći, koliko je vremena potrebno da se vidi uočljiv napredak?

Važno je napomenuti da će, bez obzira na mjeru - građevinske ili negrađevinske - koje će države iz sliva poduzeti, trebati vremena da se demonstrira uticaj, poput zaštite od poplava i suša, tako da niko ne može dati određeno vrijeme ili vremenski okvir za očigledan napredak. Međutim, Projekt je osmišljen za period od 10 godina nakon čega će doći do značajnog uočljivog napretka koji će s vremenom nastaviti jačati. Također je važno napomenuti da su sve priobalne države već pokrenule neke od ovih elemenata prekogranične saradnje, što je očigledno u mandatu Savske komisije i tekućim aktivnostima, a Projekt će se na tome samo nadograđivati.

Rad na proširenju plovnosti rijeke Save i Drine, uz razvoj turističkih kapaciteta duž ovih rijeka, spominje se u kasnijoj fazi?

Da, to je predviđeno da se dogodi u kasnijoj fazi zbog nekih od preduslova koje je potrebno napraviti, kao što je razminiranje desne obale rijeke Save u BiH, kao i dovršetak

Izgradnja otporne infrastrukture zaista je već prioritet za sve države iz sliva zbog sve veće pojave ekstremnih klimatskih događaja koji su se dogodili posljednjih godina, a i dalje predstavljaju rizik za razvoj

Regionalnog turističkog Master plana koji će se izraditi u okviru Savske komisije. Predviđeno je da će čišćenje desne obale u BiH omogućiti bolju plovnost i aktivnosti na obnovi, što bi također moglo povećati mogućnosti za promociju ekoturizma.

Rečeno je da će razvoj infrastrukture, koja je sposobna izdržati ekstremne vremenske pojave povezane s klimatskim promjenama, uskoro postati prioritet država i međunarodnih institucija. Kako će se ova pitanja rješavati u okviru Projekta?

Izgradnja otporne infrastrukture zaista je već prioritet za sve države iz sliva zbog sve veće pojave ekstremnih klimatskih događaja koji

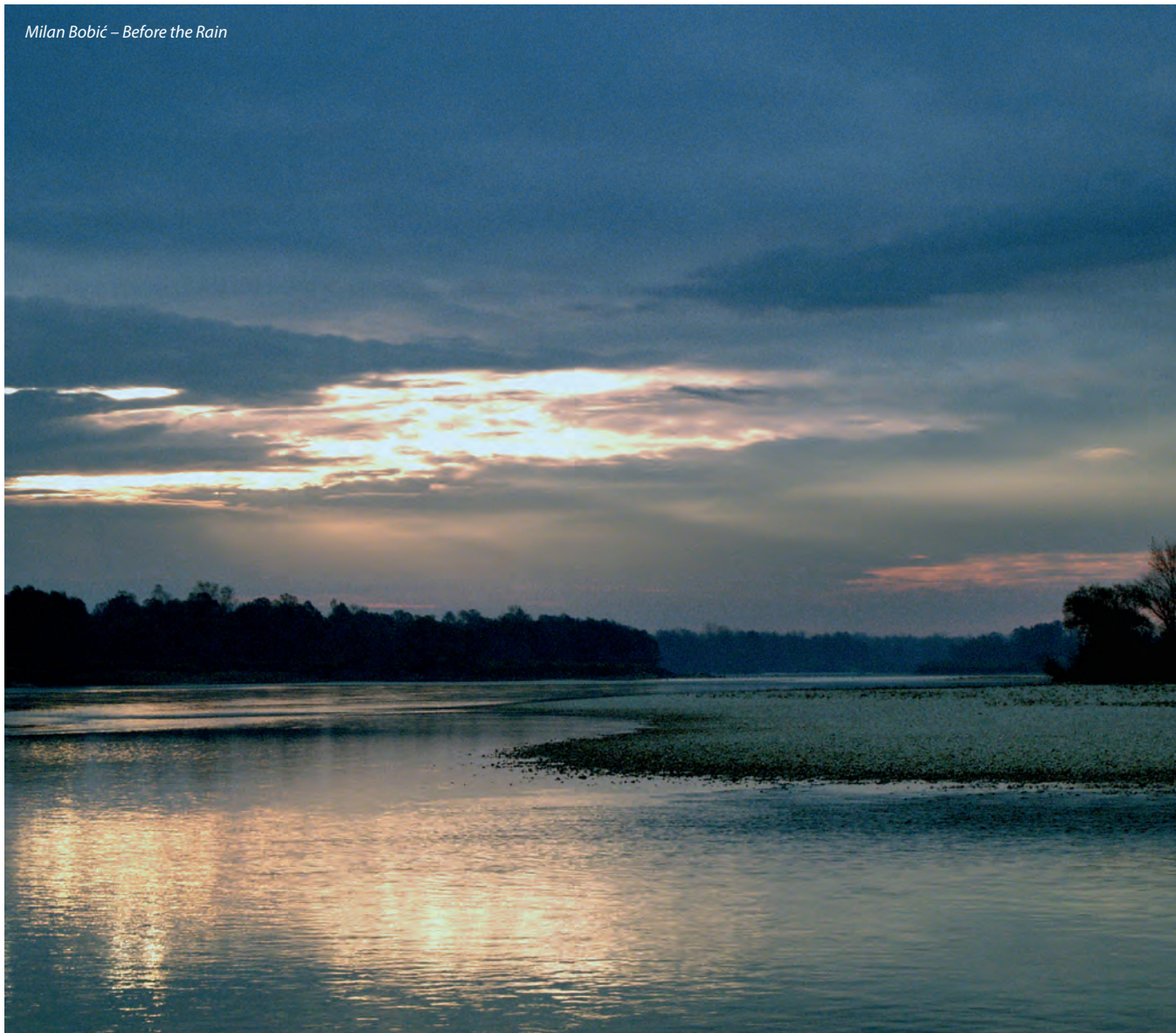
su se dogodili posljednjih godina, a i dalje predstavljaju rizik za razvoj. Uzimajući u obzir negativne uticaje nedavnih ekstremnih događaja kao što su npr. poplave iz 2014. godine, države iz sliva su razvile Planove upravljanja rizikom od poplava koji također identificiraju prioritetne aktivnosti od kojih su neke do sada provedene. U toku prve faze Projekta, države iz sliva će nastaviti graditi otpornu infrastrukturu, posebno za zaštitu od poplava, kao i rad na identifikaciji preostalih ili novonastalih prioriteta iz ažuriranog plana upravljanja rizikom od poplava i plana upravljanja riječnim slivom, koji će se implementirati tokom Faze II Projekta.

Kako biste ocijenili dosadašnju saradnju Svjetske banke i Savske komisije? Kako mislite da bi Savska komisija mogla doprinijeti uspješnoj provođenju ciljeva Projekta?

Savska komisija je snažna i ozbiljna riječna organizacija koju snažno podržavaju priobalne članice. Ovo je dokaz snažne posvećenosti i podrške prekograničnoj saradnji u oblasti voda od strane priobalnih država. Sve su to aspekti koji će omogućiti Savskoj komisiji da neizmjereno doprinese implementaciji i konačnom postizanju rezultata Projekta.

(Nastavak na sljedećoj stranici)



*(Nastavak sa prethodne stranice)**Milan Bobić – Before the Rain*

Svjetska banka dolazi kako bi dodatno podržala ovaj proces ne samo tehničkim i finansijskim sredstvima, već i sveobuhvatnim znanjem i iskustvom iz drugih zemalja i riječnih slivova



To je dijelom i zato što je Savska komisija jedinstveno pozicionirana da pruža pouzdanu platformu za izgradnju povjerenja za sve ključne zainteresirane strane u regiji, što će osigurati snažno učešće u intervencijama Projekta i održivost odgovarajućih ciljeva.

Kako vidite buduću saradnju i ulogu Savske komisije, u kontekstu spremnosti zemalja u regiji, za zajedničko rješavanje prekograničnih pitanja?

Kao što je gore spomenuto, Savska komisija je u dobroj poziciji da stalno igra ključnu ulogu u pružanju podrške prekograničnoj saradnji u oblasti voda i u tom pogledu ostat će ključni partner. Projekt je osmišljen tako da se odvija kroz dvije faze, s tim da je Faza I

predviđena kao podrška izgradnji povjerenja za prekograničnu saradnju u oblasti voda, uz provođenje nekoliko prioritarnih intervencija za zaštitu od poplava i pripremu integriranih investicija koje će zajednički provoditi države iz sliva tokom Faze II. Dakle, na neki način će uspješna implementacija Faze I Projekta također potvrditi spremnost zemalja za zajedničko rješavanje prekograničnih pitanja. Važno je napomenuti da su države iz sliva zajedno sa Savskom komisijom već započele ovu prekograničnu saradnju, a Svjetska banka dolazi kako bi dodatno podržala ovaj proces ne samo tehničkim i finansijskim sredstvima, već i sveobuhvatnim znanjem i iskustvom iz drugih zemalja i riječnih slivova. (Marko Barišić)

SARADNJA PROSLAVA DANA RIJEKE SAVE 2021.

POSTAVLJENE OZNAKE VISOKIH VODA U SVE ČETIRI ZEMLJE

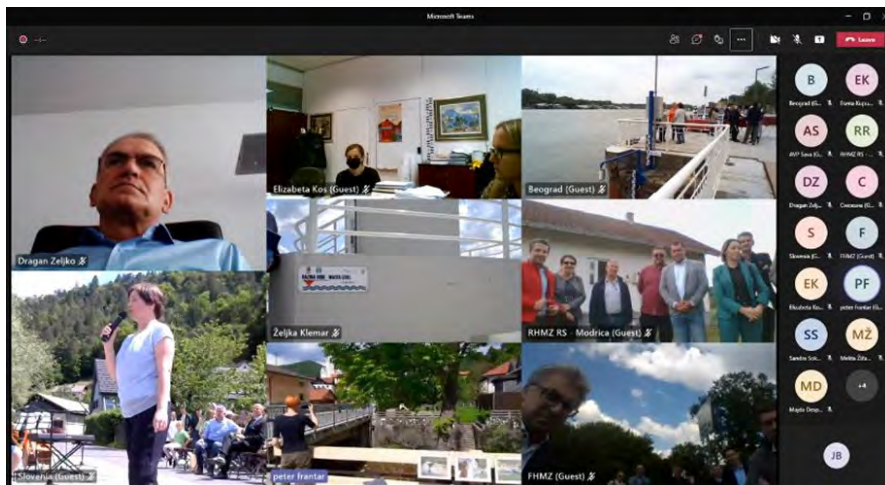
Oznake su postavljene na odabranim lokacijama koje su vidljive javnosti s ciljem da se doprinese podizanju svijesti o važnosti rijeke Save za sve segmente života

Dan rijeke Save, čiji sliv predstavlja jedan od najraznolikijih i najbolje očuvanih riječnih sistema u Evropi, obilježava se 1. juna u četiri zemlje u slivu rijeke Save – Sloveniji, Hrvatskoj, Bosni i Hercegovini i Srbiji.

Države strane Okvirnog sporazuma o slivu rijeke Save (Bosna i Hercegovina, Republika Hrvatska, Republika Slovenija i Republika Srbija) su na Prvom sastanku država strana (održanom 1. juna 2007. godine u Zagrebu) 1. juni proglasile Danom rijeke Save. Od tada se svake godine obilježava Dan rijeke Save na cijelom slivu u cilju promoviranja značaja rijeke Save za sve zemlje u slivu, njenih visokih ekoloških vrijednosti i socio-ekonomskih potencijala.

Organizovanjem različitih aktivnosti skreće se pažnja na vitalnu ulogu koju rijeka Sava i njene pritoke imaju u životu stanovništva u njenom slivu, te s tim povezano podizanje javne svijesti o važnosti prekogranične saradnje i dogovora o bitnim oblicima korišćenja i zaštite voda u slivu rijeke Save.

U tu svrhu prethodnih godina, Savska komisija je na primjer, organizovala foto



konkurse, biciklističke ture od izvora do ušća rijeke Save, a jednom prilikom upriličeno je i potpisivanje Protokola o zaštiti od poplava uz Okvirni sporazum o slivu rijeke Save u okviru proslave Dana Save.

Ove godine, Savska komisija u saradnji sa hidrometeorološkim službama država strana Okvirnog sporazuma organizovala je simbolično postavljanje oznaka visokih voda na odabranim lokacijama u sve četiri zemlje, s javljanjem uživo sa svih lokacija. U Sloveniji je postavljanje oznake bilo u Polhovem Gradcu na mostu na rijeci Božna, u Hrvatskoj u Slavonskom Brodu na šetalištu uz Savu, u Federaciji BiH na Gradskom mostu u Maglaju, u Republici Srpskoj u Modriči na zgradi mjesne zajednice, a u Srbiji je oznaka visoke vode postavljena na Savskom pristaništu u Beogradu.

Oznake visokih voda su postavljene na odabranim lokacijama koje su vidljive javnosti s ciljem da se doprinese podizanju svijesti o važnosti rijeke Save za sve segmente života, o potrebi zaštite voda te očuvanja okoliša i kulturnog naslijeđa savskog kraja. Ovo je naročito važno, iz razloga što rijeka Sava, a naročito poplave, mogu nanijeti velike štete. Ovakve situacije se ne priželjkuju, ali kad se dogode važno je da su nadležne službe, kao i cijelo građanstvo spremni, izaći na teren i adekvatno djelovati, za što će značajno doprinijeti odgovarajuće mjerenje i praćenje vodostaja.

Velike vode, odnosno visoki vodostaji su takođe i opomena da se na obnovi nasipa i plovnoća puta treba raditi stalno i temeljito, jer su rijeke veliki privredni ekonomski i turistički potencijal. Rijeka Sava je, kako kažu ljudi koji žive u njenom priobalju, uvijek više davala nego uzimala pa je briga za nju i odbrana od štetnog djelovanja visokih voda obaveza svih naraštaja, a postavljanje navedenih oznaka je doprinos ka ostvarenju navedenog.

Pored navedenog javljanja uživo sa svih lokacija, Dan Save je prikladno obilježen i putem medija Strana Okvirnog sporazuma, na Hrvatskoj radioteleviziji (HRT) i Radio televiziji Republike Srbije.



Duško Isaković,
Samo Grošelj,
Sekretarijat Savske komisije

STAJALIŠTE IMPLEMENTACIJA OKVIRNOG SPORAZUMA O SLIVU RIJEKE SAVE:
POGLED BOSNE I HERCEGOVINE

ULAGANJE U DALJE UNAPREĐENJE PLOVNOG PUTA OD SUŠTINSKOG JE ZNAČAJA ZA RAZVOJ REGIJE

Potencijal koji rijeka Sava nosi je ogroman. Zaštita od poplava ostaje u vrhu prioriteta, a aktivna podrška svih aktera je neophodna

Izgradnja novog mosta kod Gradiške preko rijeke Save, juni 2021. godine



Nismo mogli uticati na posljedice spajanja Save Dolinke i Save Bohinjke, nismo mogli uticati na tok rijeke koji će kasnije nastati, kao što nismo mogli uticati na to da će u Beogradu nastati prelijepo ušće.

Krka, Bosut, Drina, Vrbas, Lonja, Bosna, Kupa, Ukrina, Kolubara, Una nastavljaju da upotpunjuju jednu od najdužih rijeka u Evropi. Krivudajući svojim tokom kroz četiri zemlje, na kraju će uzrokovati i uspostavljanje

Savske komisije, koja će biti zadužena za brigu o zajedničkom dobru.

U svim strateškim dokumentima zemalja koje pripadaju slivu rijeke Save danas se mogu pronaći ista opredjeljenja kroz razvojnu komponentu koju može ostvariti plovni put rijeke Save. Sve ovo ne ostavlja nam

puno prostora za opuštanje. Ovaj nimalo lak zadatak pred Savskom komisijom i drugim uspostavljenim zajedničkim tijelima uspješno se savladava.

Zajedničko opredeljenje je blizu konačne realizacije. Plovni put rijeke Save se iz godine u godinu obnavlja i unapređuje. Koridor kojim

946 kilometara saradnje, povjerenja, inovacija i razvoja kao garant ekonomskog napretka

ova rijeka direktno povezuje više gradova ne ostavlja niti jedan trenutak za predah. Uporedo, provodi se i razvoj transportne infrastrukture u drugim vidovima saobraćaja. Intermodalnost je bliža nego ikada.

Svijest o značaju plovnog puta rijeke Save u Bosni i Hercegovini i njenim institucijama još uvijek nije na zavidnom nivou.

Udio u međunarodnom slivu od 39,25% traži od nadležnih institucija u Bosni i Hercegovini potpunu predanost realizaciji ciljeva Okvirnog sporazuma.

Procjenjuje se da Una, Vrbas, Ukrina, Bosna i Drina zajedno donose u Savu 1149 m³ vode u sekundi, što je čak 68% od protoka Save na njezinu ušću u Dunav. Plovidba, nosivost, širina plovnog puta, vodostaj, riječni informacijski sistem, led, pristaništa, dubina, plićak su neki od termina koji zadaju glavobolju svima koji se trude da se plovni put rijeke Save unaprijedi.

„Ukrotiti“ jednu ovakvu rijeku nije nimalo lak zadatak, a potencijal koji ova rijeka nosi je ogroman. Zato je ulaganje u dalje unapređenje plovnog puta od suštinskog značaja za razvoj regije. Zaštita od poplava ostaje u vrhu prioriteta, a aktivna podrška svih aktera je neophodna.

Integrirani razvoj koridora Save i Drine, čiji je cilj da ojača prekograničnu saradnju kroz upravljanje vodnim resursima i da unaprijedi plovnost vodnog puta i zaštitu od poplave, kao

Integrirani razvoj koridora Save i Drine samo je jedan od dokaza opšteg opredjeljenja budućeg razvoja i shvatanja značaja ekonomskog potencijala koji rijeka Sava nosi

jedan od projekata koji finansira Svjetska banka, samo je jedan od dokaza opšteg opredjeljenja budućeg razvoja i shvatanja značaja ekonomskog potencijala koji rijeka Sava nosi.

Zato i jeste jedan od glavnih zadataka u Bosni i Hercegovini razvoj kapaciteta kojima će ovaj potencijal biti i pozitivno iskorišćen. Konačno, poslije dugo vremena, deminiranje desne obale rijeke Save kao prvog preduslova za bilo koju vrstu aktivnosti na rijeci Savi, postalo je i praktično prioritarno pitanje, kao glavna smetnja daljem razvoju infrastrukture na ovom području, čiju realizaciju uskoro očekujemo, do ostvarenja konačnog cilja – desne obale rijeke Save bez mina.

U junu 2021. godine konačno je započela rekonstrukcija Luke Brčko, uz podršku Evropske unije i EBRD. Nakon obnove, luka može postati centralna poveznica za ekonomiju regije. Razvojem privrede i uključivanjem u međunarodne privredne tokove može se u budućnosti očekivati intenziviranje korišćenja Luke, naročito u sistemu integrisanog transporta.

S obzirom da je „Luka Brčko“ locirana skoro u centru grada povezana je sa drumskom i željezničkom mrežom, ali isti postavljaju

određena ograničenja za puno i nesmetano korišćenje Luke.

U planu je izgradnja nedostajuće infrastrukture u „Luci Brčko“ izgradnjom pretovarnog platoa i izmještanjem postojeće i izgradnjom nove trase industrijske pruge, od željezničke stanice do Luke.

U 2019. godini u Luci Brčko je pretovareno 130.402 tona tereta, a pored toga, raspoloživi lučki kapaciteti bili su iskorišćeni manje od 25%. Slično je bilo i u 2020. godini.

Sa ciljem rješavanja ključnih problema u vodenom transportu nameće se sanacija korita s ciljem proširenja mogućnosti korišćenja plovila klase IV uzvodno od Brčkog, uspostavljanje potpuno funkcionalnog riječnog informacijskog sistema, rekonstrukcija i izgradnja infrastrukturnih kapaciteta u Luci Brčko, uključujući i željezničku vezu u gradskom području Brčkog.

Ono što je posebno zanimljivo jeste interes koji postoji za izgradnju novih luka. Intermodalne luke na rijeci Savi zasigurno imaju perspektivu i ekonomsku opravdanost.

Savska komisija ostaje glavni instrument za postizanje ciljeva postavljenih Okvirnim sporazumom, čemu Bosna i Hercegovina daje punu podršku. Sekretarijat Savske komisije je dokazao da, pored svih izazova, može odgovoriti zadatku i napredak u svim oblastima nadležnosti Sekretarijata je jasno vidljiv.

Saradnja, povjerenje, inovacije i razvoj su odlike uređenog sistema, a ekonomski napredak uz visoku svijest o očuvanju životne sredine ostvaruje se kao rezultat ove uspješne međunarodne saradnje.



Rijeka Sava kod mosta Brčko
– Gunja, juni 2021. godine



Zoran Andrić,
Član Savske komisije
iz Bosne i
Hercegovine

AKTIVNOSTI POBOLJŠANJE STATUSA SVIH VODA I JAČANJE SURADNJE U PRAVCU DUGOROČNE I ODRŽIVE UPOTREBE VODNIH RESURSA

BLIŽI SE ZAVRŠETKU IZRADA DRUGOG PLANA UPRAVLJANJA SLIVOM RIJEKE SAVE

Planirano je da bude prihvaćen na 9. sastanku strana Okvirnog sporazuma koji će se održati u jesen 2022. godine

Vodna tijela površinskih voda	296
Vodna tijela podzemnih voda	60
Aglomeracije sa > 2.000 ES	431
Aglomeracije sa tretmanom otpadnih voda	133
Značajni industrijski zagađivači	168
Prekidi poduznog kontinuiteta riječnog toka	33
Vodna tijela površinskih voda u dobrom ekološkom statusu/potencijalu ili iznad toga	68
Vodna tijela površinskih voda u dobrom hemijskom statusu	159
Vodna tijela podzemnih voda u dobrom hemijskom statusu	36
Vodna tijela podzemnih voda u dobrom kvantitativnom statusu	42
Zaštićena područja > 100 ha	519

SLIKA 1: Osnovne brojke-preliminarni rezultati drugog SRBMP

U skladu sa Okvirnim sporazumom o slivu rijeke Save (FASRB), jedinstvenim međunarodnim ugovorom koji u sebi integriše mnoge aspekte upravljanja vodnim resursima, potpisnice FASRB-a, države Strane, Slovenija, Hrvatska, Bosna i Hercegovina i Jugoslavija (kasnije Srbija i Crna Gora, a zatim Srbija), odlučne su da u saradnji ulože sve napore u provođenju Okvirne direktive o vodama (60/2000/EC)-ODV na nacionalnim nivoima kao i na zajedničkim međunarodnim slivovima i da sarađuju na pripremnim aktivnostima vezanim za izradu zajedničkog i/ili integrisanog Plana upravljanja vodnim resursima sliva rijeke Save. Takođe, saradnja u okviru sliva rijeke Save preko ISRBC uspostavljena je, potpisivanjem Memoranduma o razumijevanju i sa Crnom Gorom, 2013. godine.

Primjena ODV (u skladu sa zahtjevima čl.5 I čl.6 ODV) u slivu rijeke Save započela

je razvojem Prve analize sliva rijeke Save (SRBA). U okviru SRBA analizirane su kvantitativne i kvalitativne karakteristike voda rijeke Save i glavnih pritoka, izrađeni su izvještaji o hidrologiji i hidromorfologiji i obrađena su integraciona pitanja upravljanja vodama sa sektorima upravljanja poplavnim rizicima i razvojem plovidbe. Savska komisija je prihvatila Izvještaj SRBA u septembru 2009. godine, kao dobru osnovu za dalje aktivnosti na izradi Plana upravljanja slivom rijeke Save (SRBMP).

Aktivnosti na izradi prvog Plana upravljanja slivom rijeke Save (SRBMP) pokrenute su 2009. godine, slijedeći metodologiju i procese primjenjene na nivou sliva rijeke Dunav. Međutim, komparativnu prednost u planiranju u okviru sliva Save predstavlja detaljnija analiza omogućena primjenom strožijih kriterija za rijeku Savu, njene glavne pritoke i vodna tijela podzemnih voda od značaja za slivno planiranje. Izradom

prvog SRBMP uspostavljen je integralni pristup upravljanja vodama koji je uključio izradu ekonomskih analiza korišćenja voda i postavio kao cilj planiranja integraciju pitanja zaštite voda u druge sektorske politike. Nakon procesa javnih konsultacija, strane Okvirnog sporazuma odobrile su 1. SRBMP na svom Petom sastanku Strana održanom u Zagrebu (Republika Hrvatska) 2. decembra 2014.

Proces primjene ODV nastavljen je razvojem 2. Analize sliva rijeke Save (nadogradnje prvog izvještaja SRBA (2009)), čija je izrada završena 2016. godine, a koja je usvojena od strane Savske komisije u junu 2017. godine. Paralelno su vođene aktivnosti na pripremi izvještaja o značajnim pitanjima za upravljanje vodama u slivu Save sa privremenim pregledom statusa implementacije programa mjera iz prvog SRBMP. Oba pomenuta dokumenta predstavljala su ključne korake u pripremi drugog SRBMP.

Priprema drugog SRBMP počela je 2018. godine, imajući za cilj poboljšanje postojećeg planskog okvira za sprečavanje daljeg pogoršanja ili/i poboljšanje statusa svih voda i zaštićenih područja i jačanje saradnje u pravcu dugoročne i održive upotrebe vodnih resursa u slivu rijeke Save. Drugi SRBMP takođe ima za cilj da unaprijedi postojeću platformu za integralno, tehnički, ekološki i ekonomski zdravo i održivo upravljanje vodama, opisujući trenutni status u slivu i mjere planirane za provođenje kako bi se ispunili utvrđeni ciljevi. Izrada 2 SRBMP, slijedeći zahtjeve ODV-a koja pretpostavlja reviziju planova upravljanja slivnim područjima u šestogodišnjim ciklusima, trenutno je u završnoj fazi.

Struktura 2. SRBMP prati okvir 1. SRBMP i obuhvata poglavlja koja se odnose na opće karakteristike sliva rijeke Save, ažuriranu procjenu značajnih antropogenih pritisaka na površinske i podzemne vode, pruža pregled nacionalnih monitoring mreža površinskih i podzemnih vodnih tijela i preliminarni popis područja zaštićenih u skladu s EU i nacionalnim zakonodavstvima. Pored toga, 2. SRBMP pruža sveobuhvatnu ocjenu

MAP 13: Urban wastewater discharges – Reference year 2016 - draft



This product is based on national information provided by the Parties to the FASRB (SI, HR, BA, RS) and ME. The borders between the countries cooperating in preparation of the Sava River Basin Analysis have not been finally determined. The content and maps of this report do not prejudice the determination or demarcation of the borders in any way.

2ND SAVA RIVER BASIN MANAGEMENT PLAN
Processed and compiled by the Secretariat of the ISRBC, May 2021

SLIKA 2: Analiza značajnih pritisaka-Protoci urbanih otpadnih voda - Nacrtna karta

ekološkog statusa/potencijala i hemijskog statusa površinskih vodnih tijela i hemijskog i kvantitativnog statusa podzemnih vodnih tijela, uključuje pregled ciljeva zaštite okoliša/ upravljačkih ciljeva i listu postojećih izuzetaka za površinska i podzemna vodna tijela. Drugi SRBMP bavi se integracionim pitanjima od značaja za upravljanje vodama u slivu Save kao što su razvoj plovidbe, upravljanje rizicima od poplava, proizvodnja hidroenergije i razvoj poljoprivrednog sektora. U pripremi su ekonomska analiza značajnih upotreba vode i vodnih usluga u prekograničnom kontekstu sliva rijeke Save i izrada sveobuhvatnog programa mjera za sljedeći ciklus planiranja s ciljem da se preciziraju aktivnosti potrebne za ispunjavanje ciljeva ODV, koji su za sliv Save definisani kroz vizije i specifične ciljeve za svako pitanje od značaja za upravljanje vodama.

Razvoj 2. SRBMP baziran je na zvaničnim nacionalnim podacima i informacijama dostavljenim od strane članova Stalne ekspertske grupe za upravljanje riječnim slivom i Stalne ekspertske grupe za GIS u okviru Savske komisije. Procesom pripreme

2. SRBMP koordinira Sekretarijat Savske komisije. U vrijeme pripreme drugog SRBMP-a, u fazi finalizacije su nacionalni planovi upravljanja riječnim slivom za treći ciklus planiranja u Sloveniji i Hrvatskoj, za drugi planski period za sliv rijeke Save u Bosni i Hercegovini (u Federaciji, Republici Srpskoj i Distriktu Brčko) a izrada prvih nacionalnih planova je u toku u Srbiji i Crnoj Gori.

Kao rezultat izazovnog procesa planiranja i implementacije mjera, vidljiv je značajan napredak kako na nacionalnim tako i na prekograničnom nivou u pogledu usklađenosti sa zahtjevima ODV. Međutim, brojni nedostaci i nepoznanice, kao i različita otvorena pitanja u prekograničnom kontekstu ostaju značajna, definišući jasne smjernice za buduće cikluse planiranja.

Uzimajući u obzir suštinsku važnost osiguravanja širokog učešća zainteresovanih strana i podsticanje uključivanja stručne i šire javnosti za uspješno planiranje i upravljanje riječnim slivom, planirano je da faza javnih konsultacija za drugi SRBMP počne na jesen 2021. Nakon eventualnih komentara, očekuje

se da će Savska komisija usvojiti izmijenjeni SRBMP na proljeće 2022. Planirano je da bude prihvaćen na 9. sastanku strana Okvirnog sporazuma koji će se održati u jesen 2022. godine.

Jovana Rašeta Bastić,
Samo Grošelj,
Sekretarijat Savske komisije



PROJEKAT ZNAČAJAN KORAK PREMA EFIKASNOM UPRAVLJANJU VANREDNIM SITUACIJAMA U SLIVU RIJEKE SAVE

WACOM ĆE SMANJITI RIZIKE IZAZVANE SLUČAJNIM ZAGAĐENJEM I POPLAVAMA

Ovaj projekat, koji se provodi uz finansijsku pomoć EU fonda, započeo je 1. jula 2020. i biće završen 31. decembra 2022.

Prekogranična prevencija poplava i incidenata

Prepoznajući vitalni značaj prekogranične saradnje, Strane Okvirnog sporazuma o slivu rijeke Save (SI, HR, RS i BA) trebale bi preduzeti mjere za sprečavanje ili ograničavanje opasnosti, kao i za smanjenje i uklanjanje štetnih posljedica poplava i incidenata koji uključuju supstance u vodi. Zbog klimatskih promjena očekuju se češće i intenzivnije ekstremne vremenske prilike, poput tragične poplave u maju 2014. kada su intenzivne padavine prouzrokovale poplave, eroziju i klizišta duž malih vodotoka i katastrofalne poplave na rijeci Savi i njenim pritokama. Takođe, primećuje se pojava neočekivanog zagađenja, a najnovije neočekivano zagađenje dogodilo se u BiH (rijeka Spreča 2018.) i Sloveniji (rijeka Rižana 2019.). Ti su događaji glavni izazovi za projekt WACOM, koji se provodi uz finansijsku pomoć EU fonda (EDRF, IPA).

Glavni cilj WACOM-a je smanjenje rizika za okoliš

Glavni cilj projekta je smanjenje rizika za okoliš, povezanih sa neočekivanim zagađenjem i poplavama koji imaju prekogranični uticaj u slivu rijeke Save. Projekat je započeo 1. jula 2020. i biće završen 31. decembra 2022. U prvoj godini implementacije većina aktivnosti bila je usmjerena na radni paket 1 – WP1 (Istraživanje i definisanje zajedničke pripravnosti i reagovanja) i radni paket 2 – WP2 (Razvoj zajedničke pripravnosti i seta alata za reagovanje).

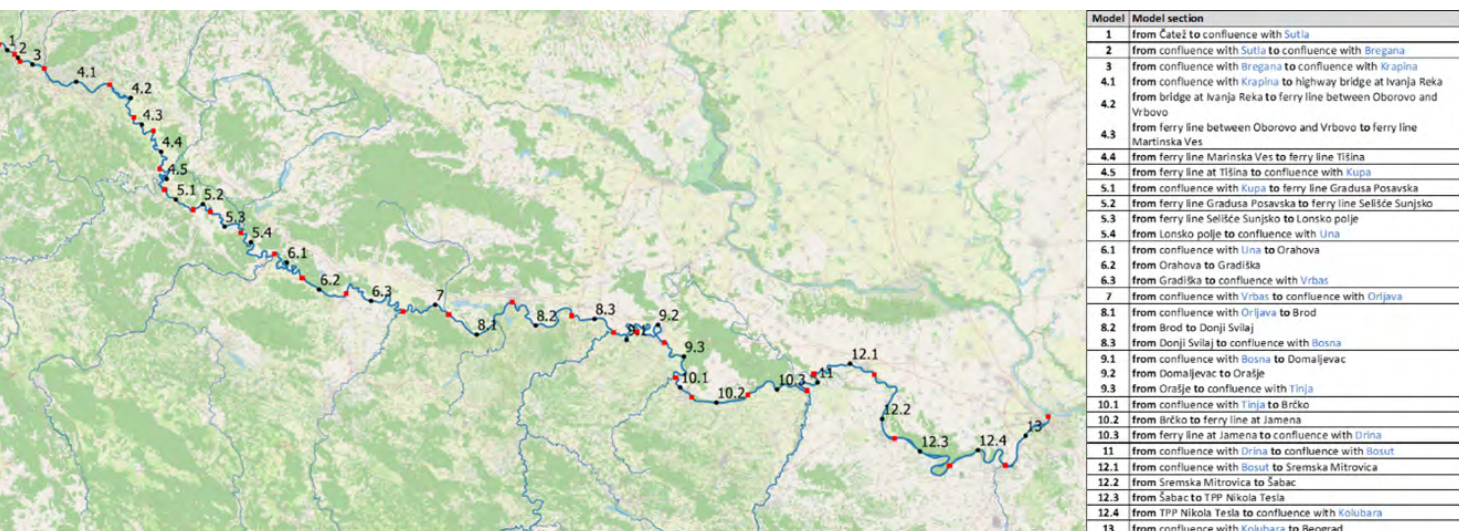
WP 1. Istraživanje i definisanje zajedničke pripravnosti i reagovanja

Proces mapiranja institucija, procedura i aktivnosti obavljen je unutar tri oblasti - civilne zaštite, upravljanja vodama i riječne plovidbe - na različitim nivoima (strateškom, taktičkom i operativnom) s posebnim interesovanjem za postojeće procedure na snazi. Čitav postupak mapiranja proveden je u izuzetno dinamičnom okruženju kako bi se zadovoljilo više funkcija za praćenje početnih pretpostavki projekta i ispitivanje trenutne situacije. Ono je takođe poslušilo

za analizu nedostataka za identifikovanje specifičnih područja u kojima je potrebno promijeniti i/ili razviti nove procedure, te kao osnova za organizaciju i održavanje prve četiri nacionalne radionice u maju/junu 2021. One su održane vrlo uspješno, obzirom na činjenicu da su planirane u vrijeme kada je pandemija COVID-19 bila na vrhuncu. U uvodnom dijelu predstavljeni su WACOM projekat i najznačajnije aktivnosti Međunarodne komisije za sliv rijeke Save. Centralni dio činila su dva bloka. U prvom bloku prikazane su analize institucija, procedura i aktivnosti nacionalnih sistema, dok je u drugom dijelu predstavljen Sistem za upravljanje incidentima. Pored partnera na WACOM projektu, na radionici je prisustvovao i značajan broj predstavnika ciljnih grupa, koji su svi prepoznali značaj i važnost ovog projekta, te svojim doprinosom i komentarima potvrdili ispravan pravac djelovanja u projektu.

WP T2 Komponenta modeliranje koja omogućava modeliranje propagacije nafte mrlje

Glavni cilj WP T2 je razvoj brzog zajedničkog seta alata za pripravnost i reagovanje,



SLIKA 1: Opseg područja modeliranja i dionice za modeliranje



SLIKA 2: Primjer umrežavanja modela sa terenskom mrežom kao podlogom

koji će biti izrađen na usklađen način sa operativnom porodicom alata koje koristi Savska komisija, kao što su Geoinformacioni sistem (Sava GIS), Hidrološki informacioni sistem (Sava HIS) i Sistem prognožiranja i upozoravanja na poplave u slivu reke Save (Sava FFVS). Modul za modeliranje zasnivaće se na dvodimenzionalnom (2D) hidrauličnom modeliranju i propagacije izlivanja nafte.

Stoga je prvi glavni zadatak u okviru radnog paketa WP2 bio razvoj lokalnih 2D hidrauličkih modela. To je urađeno za približno 700 km dugačku dionicu rijeke Save, od Čateža u Sloveniji do Beograda u Srbiji. Za Sloveniju su modeli propagacije već razvijeni u prethodnom projektu, finansiranom od strane URSZR.

U drugom koraku, riječni sektori su dalje podijeljeni na kraće dionice za modeliranje, pri čemu su granice modela postavljene na prirodnim granicama (npr. ušće rijeke) ili na relevantnoj infrastrukturi (npr. trajektna linija, luka itd.), kao što je prikazano na Slici 1.

2D hidrauličko modeliranje izvedeno je primjenom RiverFlow2D modela, koji predstavlja kombinovani hidrološki i hidraulički, kao i model konačnih

zapremina transporta pokretnog dna korita i zagađenja za rijeke, ušća i aluvijalne ravni. Može odrediti pravac poplava u rijekama i simulirati poplavu preko aluvijalnih ravni i složenih terena u visokoj rezoluciji, izuzetno brzo, stabilno i precizno. 2D hidraulični modeli zasnivaju se na fleksibilnom mrežnom sistemu, gdje je domen modela predstavljen mrežom trouglastih elemenata koji čine povezanu mrežu. Veličine mrežnih okaca aktuelnog modela su određene tako da pružaju adekvatan nivo rezulacije, a istovremeno omogućavaju izvođenje simulacija modela u razumnom vremenskom okviru na dostupnoj konfiguraciji računara. Primjer 2D računске mreže može se vidjeti na slici 2.

U sljedećim fazama hidrauličkog modeliranja fokus će biti na pokretanju modela za različite obime malih protoka i na potencijalna usklađivanja modela kroz postupke kalibracije/validacije modela.

Pored toga, već su provedena testiranja i izbor odgovarajućeg modela izlivanja nafte, na osnovu unaprijed proračunate hidraulike pojedinačnog riječnog sektora, što omogućava jednostavan razvoj različitih scenarija izlivanja nafte i brže pokretanje modela izlivanja nafte. Analiza je već objavljena u uglednom naučnom časopisu

i dostupna je na internet stranici časopisa (<https://doi.org/10.3390/w13121620>).

Smanjivanje rizika zagađenja i poplava jačanjem sektorske saradnje među institucijama

Prva dva radna paketa su osnova za verifikaciju zajedničke pripravnosti i reagovanja na pilot lokacijama (WP T3), a razvijaće se i strategija za sprovođenje koordinisane pripravnosti i reagovanja (WP T4). Ovo će osigurati da se projekat ne zaustavi u decembru 2022. godine i nadamo se da će rezultat WACOM-a biti smanjenje rizika izazvanih slučajnim zagađenjem i poplavama, putem jačanja transnacionalne i međusektorske saradnje između institucija koje upravljaju pripravnonošću i odgovorima na poplave i slučajna zagađenja, kao i fazama reagovanja.

Više informacija o projektu dostupno je na WACOM DTP website (<http://www.interreg-danube.eu/approved-projects/wacom>), Facebook (<https://www.facebook.com/WACOMSavaRiverBasin/>), i Twitter (<https://twitter.com/WacomSrb>).

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AZUR

KOMPETENCIJE PROGRAM UNAPREĐENJA SISTEMA OBRAZOVANJA I OSPOSOBLJAVANJA ZA STICANJE ZVANJA U UNUTRAŠNJOJ PLOVIDBI



IMPLEMENTACIJOM NOVE EU DIREKTIVE KVALIFIKACIJE BRODARACA BIĆE PRIZNATE NA CIJELOM PODRUČJU UNIJE

Sve potvrde o stručnoj spremi, službene brodarske knjižice i brodski dnevnik trebaju biti u skladu s Direktivom, nosioci takvih kvalifikacija mogu obavljati svoju profesiju na svim unutrašnjim plovnicima Unije

Temeljem dosadašnjih istraživanja koje je Fakultet prometnih nauka poduzeo očekuje se da će se potreban broj brodara dugoročno povećavati. S jedne strane očekuje se pad broja manjih brodova što zahtijeva manji broj brodara. Međutim, broj većih plovila će se povećati. Kako su ta plovila radno zahtjevnija, u skladu s tim očekuje se porast potražnje za kvalifikovanim kadrovima u unutrašnjoj plovidbi. S druge strane, zbog sve veće potražnje za prevozom u budućnosti, trebaće veći broj kvalifikovanih kadrova u unutrašnjoj plovidbi. Očekuje se porast količine tereta u prometu na unutrašnjim plovnicima (u tonskim kilometrima). Očekuje se da će se broj raspoložive radne snage dugoročno smanjiti zbog starenja, stvarajući jaz između potrebnog i raspoloživog broja kvalifikovanih brodara.

Implementacija Direktive je izuzetno bitna za olakšavanje i poticanje mobilnosti radne snage u sektoru unutrašnje plovidbe osiguravajući da kvalifikacije brodara budu priznate u cijeloj Uniji. Priznavanje profesionalnih kvalifikacija u unutrašnjoj plovidbi radikalno je izmijenjeno stupanjem na snagu ove nove Direktive. Usvojena Direktiva 2017/2397 poništava Direktivu 91/672/EEZ i Direktivu 96/50/EZ te predviđa postepeno uvođenje prelaznih mjera. Ova nova Direktiva sadrži značajan broj opsežnijih pravnih obaveza u poređenju s Direktivom 91/672/EEZ i Direktivom 96/50/EZ. Obzirom na to i na činjenicu da Direktiva 2017/2397 uključuje odredbe niza kvalifikacija koje do sada pravni okvir nije zahtijevao, tj. članove posade koji nisu zapovjednici, stručnjake za upotrebu LNG-a kao goriva i stručnjake

za putničku plovidbu, sa aspekta zahtjeva članova posade o povećanoj zapošljivosti širom Unije neophodno je, provodeći Direktivu, da sve potvrde o stručnoj spremi, službene brodarske knjižice i brodski dnevnik budu u skladu s Direktivom.

Tragom toga, nosioci takvih kvalifikacija mogu obavljati svoju profesiju na svim unutrašnjim plovnicima Unije. Osim što je potrebno organizovati ispite, takođe je potrebno vrednovati kompetencije koje se zahtijevaju za plovidbu na pojedinim dionicama unutrašnjeg plovnog puta s posebnim rizicima, te potrebna sredstva kojima se dokazuje da su ti zahtjevi ispunjeni. Analiza tržišta unutrašnje plovidbe, kretanja na tržištu čak i u uvjetima cijele 2020. godine pod uticajem COVID-19 pandemije, pokazala je stalan trend porasta potreba i interesa za stručnim kadrovima u sektoru unutrašnje plovidbe. Sve kompetencije iz CESNI standardizovanih kompetencija moraju biti integrisane u sve odobrene

programe obrazovanja i osposobljavanja namijenjenima članovima posade na operativnom i upravljačkom nivou u fazi provođenja Direktive EU 2017/2397 u sistemu obrazovanja i/ili osposobljavanja. To je potrebno kako bi osiguralo da programi obrazovanja i osposobljavanja budu zasnovani na kompetencijama koje moraju biti priznate na nivou EU. Novi reformisani sistem obrazovanja i osposobljavanja zasnovan na kompetencijama uključivaće sve zahtjeve za certifikaciju osoblja kao članova posade. Ovaj novi sistem će biti podložan redovnoj reviziji u stručnim grupama CESNI-a, kako bi se održao i garantovao visok nivo sigurnosti unutrašnje plovidbe, te pratio razvoj novih tehnologija s ciljem uključivanja novih tehnologija i novih vještina u budućnosti. Potražnja za kvalifikovanom radnom snagom se temelji na kompetencijama koje će povećati sigurnost i mobilnost radne snage, te potrebom modernog sistema edukacije i treninga. Kandidati koji završavaju obrazovanje i osposobljavanje u skladu s novom Direktivom EU-a 2017/2397 o priznavanju profesionalnih kvalifikacija u unutrašnjoj plovidbi i CESNI standardima kompetencija dobiće svjedodžbu Unije o kvalifikacijama, što omogućuje rad u cijeloj Evropskoj uniji. Prenos Direktive (EU) 2017/2397 Evropskog parlamenta i Vijeća o priznavanju profesionalnih kvalifikacija u unutrašnjoj plovidbi i stavljanje van

snage Direktiva Vijeća 91/672/EEC i 96/50/EC iz nacionalnog zakona važna je faza implementacije Evropskog zakona.

Direktive moraju biti prenesene u nacionalnu politiku kako bi se ostvario uticaj EU zakona. Pružajući zajedničke standarde širom Unije neophodne za postizanje unutrašnjeg tržišta za radnike u sektoru unutrašnje plovidbe ova Direktiva EU-a pojednostavljuje pravni okvir koji se odnosi na profesionalne kvalifikacije u evropskom sektoru unutrašnje plovidbe. Odredbama Direktive minimizira se administrativni teret za one kandidate koji su završili odobreni program osposobljavanja, izbjegavajući nepotrebno polaganje dodatnih upravnih ispita. Standardi za kompetencije moraju se primijeniti tokom razrade/revizije programa obrazovanja i osposobljavanja za osoblje unutrašnje plovidbe kako bi se udovoljilo zahtjevima EU Direktive 2017/2397 u pogledu nivoa znanja i sposobnosti članova posade. Direktiva je jedan od pravnih instrumenata dostupnih evropskim institucijama za provođenje politike Evropske unije. Stoga ga usvajaju institucije EU-a u skladu s osnivačkim ugovorima. Jednom usvojen na nivou EU-a zemlje EU ga prenose u svoju regulativu. Simulatori korišteni za procjenu kompetencija trebaju biti odobreni od strane nadležne certifikacione institucije. Odobrenje treba biti izdano nakon zahtjeva kada je dokazano da simulator zadovoljava CESNI standarde za simulatore.

Prva i najvažnija smjernica i preporuka za unapređenje i modernizaciju procesa obrazovanja i osposobljavanja u unutrašnjoj plovidbi je revizija prevoda Direktive i revizija prevoda CESNI standarda. Preporuka je uspostava mogućnosti izvedbe obrazovanja i osposobljavanja na daljinu, kao oblika učenja i podučavanja u kome se ne ostvaruje fizička prisutnost, već se proces odvija u virtuelnom okruženju uz podršku digitalnih tehnologija. Ova potreba je došla do izražaja upravo u aktualnoj situaciji COVID-19 pandemije. Kako bi se uspješno planirao proces obrazovanja i osposobljavanja na daljinu, pri odabiru najprikladnijeg sistema za provođenje, specifičnog alata ili sadržaja, nužno je poznavati njihove glavne karakteristike. Također, neophodno je prilagođenje sadržaja online izvođenju, naravno onog dijela sadržaja koji je moguće izvoditi na daljinu, i organizacija povremenih videokonferencijskih susreta sa polaznicima. Postojeći nastavni materijali trebaju biti sadržajno dopunjeni i modernizirani u skladu s CESNI standardima, ovo nije preporuka već obaveza. Obzirom na obim i zahtjevnost ovog procesa potrebno je da institucije/centri koji planiraju provođenje obrazovanja i osposobljavanja odmah započnu s dopunama i izmjenama nastavnog materijala. Posebno je neophodno pripremiti materijale za upravljački i operativni nivo.

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