

Preparing FAIRway 2 works in the Rhine-Danube corridor

MINUTES (final)

Stakeholders' Forum Meeting 13 (SHFM13)

Date	06.02.2025
Time	10:00 – 12:00
Place	Online meeting (Google Meet): https://meet.google.com/mka-qwgx-pyh
Participants	See List of Participants (LoP)
For the minutes	Katarina Marinković, Predrag Živadinović

The presentations are available for download on the [Stakeholders' Forum website](#).

Welcome note

Mr. Ljubiša Mihajlović welcomed all to the 13th Stakeholder Forum meeting for the monitoring and modelling activities carried out on the common Croatian-Serbian Danube section. These activities are part of the EU funded action "Preparing FAIRway 2 Works in the Rhine-Danube Corridor". He introduced himself as a representative of the Directorate for Inland Waterways. The Serbian Ministry (MGSI) is a project partner responsible for organising and coordinating the Stakeholder Forum in the project and the Contracting Authority for execution of the modelling activities.

Ms. Marina Ilić, the chairperson of the forum meeting, provided an overview of the agenda and the presentations scheduled for the meeting.

Modelling & Multi-Criteria Analysis of the common Danube section

Hydraulic and morphological modelling of the SRB-CRO common stretch of the Danube River

(Romeo Soare, Hidrozavod DTD, 2025-02-

06_PPT_PFW2_SHFM13_01_Project_Activities_Overview_v3_R.Soare.pdf)

Mr. Soare, responsible for management activities, gave an overview of project activities and current status.

The key topics covered included the basic project data, activities breakdown, summary of outputs and next steps.

The activities within "Modelling & Multi-Criteria Analysis (MCA) of the common Danube section" represent last missing milestones in the "Preparing of FAIRway 2 works within the Rhine-Danube Corridor". Activities 1, 2, and 3 of "Modelling and MCA analysis" have already been completed. The primary focus of the presentation was therefore on Activity 4 and the next phases.

Activity 4 pertains to detailed 2D hydrodynamic and morphological modelling for selected sectors and comprises nine tasks. Completed tasks include data collection, model setup, calibration, and verification. The ongoing efforts involve scenario definition, model preparation for scenarios, preliminary result analysis, and to apply multi-criteria analysis (MCA). Following this, a technical report will be developed to document the MCA running results and the 2D modelling activities within the project.

Regarding data collection, the dataset has been updated with information from the Plovput, existing river structures, morphological data, river flow, and suspended sediment data. A critical step in 2D model development was the creation of a digital terrain model and computational grid based on river geometry, as well as parameter setting. This step was essential for developing models for various scenarios and identifying critical areas.

During the calibration phase, measurements of flow velocity, suspended sediment, and bathymetry from September 2023 were used. The verification phase involved confirming model parameters to ensure alignment with the available dataset, validating the accuracy of the modeling approach.

Several scenarios were developed to explore potential improvements in navigation conditions and river morphology. The baseline scenario represents a "do-nothing" approach. Other scenarios introduce various measures, ranging from structural modifications and navigational adjustments to interventions aimed at restoring more natural river conditions. One of the scenarios has since been revised and now includes the creation of a new channel, which requires partial or complete removal of some existing groynes.

Regarding model preparation and scenario representation, visual representations of chevrons and bottom sills, along with simulation results, illustrate the flow calculations and morphological changes for the "do-nothing" scenario. Additionally, initial sediment transport conditions have been simulated as part of ongoing activities.

In terms of outputs, the 2D model has been calibrated, executed, and is now ready for use. The definition of scenarios is nearly complete, while the technical reports for the 2D models and multi-criteria analysis are still in progress. Work continues on finalizing the information and preparing the reports.

Looking ahead, by the end of March, all scenarios and corresponding modelling solutions should be finalized.

Technical reports will be completed and presented for review, followed by an expert assessment and potential adjustments. The results will then be analyzed, and in the final stage of Activity 4, the multi-criteria analysis will be applied to produce the conclusive outcomes of the 2D modeling activities.

Questions & Answers:

Q (Mr. Georg Rast, consultant): Currently, all scenarios are integrated into one overall activity. It was initially understood that investigating the scenarios in comparison to doing nothing and other steps should be organized for each critical sector. Is this approach merely a matter of presentation, or will the analysis be performed separately for each critical sector?

A (Mr. Nikola Rosić, Hidrozavod DTD): It will be analysed at once in the model. One model for five sectors. If any changes need to be made to the scenario for a structural intervention, it is run again for all together. There are always problems with boundary conditions, as results from one sector can influence those in adjacent sectors. With separate models, these effects would have to be accounted for through boundary conditions, which is not always easy. Therefore, one integrated model was chosen with the main goal of ensuring that all sectors are aligned with the desired outcomes.

Q (Ms. Lucia Karpatyova, viadonau): In the presentation two sidearm openings in Čivutski rukavac and Aljmaš were included in both structural measures (scenario two) and re-naturalization (scenario four). Can you clarify?

A (Mr. Nikola Rosić, Hidrozavod DTD): A sidearm activation or reactivation is viewed as a re-naturalization measure. These two measures (sidearm openings) were integrated into the scenario two along with other structural measures. While it can also be considered a structural measure, based on the expected benefits from the creation of the channel, it may be perceived differently – as renaturalization measure in scenario four.

Q (Mr. Arno Mohl, WWF Austria): First, regarding fairway realignment, it appears that it pertains to non-structural measures. Should the width parameter remain in this scenario?

A (Mr. Nikola Rosić, Hidrozavod DTD): Yes, it's non-structural. The geometry of the riverbed remains unchanged. Regarding fairway width in the evaluation, only 200 meters is being considered for most of the section. Such an analysis can be combined with all other scenarios. The aim is to observe the effects in isolation from other measures.

Q (Mr. Arno Mohl, WWF Austria): There are certain goals for navigation, with specific parameters defined. The question is whether these goals would be changed or modified in this scenario. For example, if the fairway width goal of 200 meters were reduced to 100 meters in order to accommodate one-way traffic instead of two-way traffic.

A (Mr. Romeo Soare, Hidrozavod DTD): A bottleneck area for navigation will occur when the fairway width is reduced from 200 to 100 meters. This will result in restrictions.

Additional information (Mr. Siniša Špegar, TA): The fairway re-alignment primarily involves shifting the fairway with a width of 200 meters. If reduced dimensions, such as 100 meters, are considered, the level of service becomes a key factor. If the consultant modelled a 100-meter fairway, this would introduce navigation restrictions, potentially limiting traffic to one-way navigation or other constraints. In this context, the question arises whether, in addition to shifting the fairway width of 200 meters, different levels of service, including reduced fairway widths were also modelled. This matter has been thoroughly discussed with the administration. Given that a 100-meter fairway would inherently impose navigation restrictions, modelling it may not be necessary.

A (Mr. Nikola Rosić, Hidrozavod DTD): The main focus is on proposing measures to improve navigation, and the task is to analyze the effects of these measures. A single fairway width was chosen to keep the methodology as simple as possible. This width is not simulated by the model itself, as the model simulates flow, not navigation; rather, the fairway width is used as a criterion when assessing the effects of the measures, as explained in the MCA methodology. Therefore, the selected width of 200 meters is a fixed reference criterion, and a change in fairway width cannot be adopted as a measure. Conducting a reverse analysis is not planned and is not being considered.

2D Modelling (*Nikola Rosić, Hidrozavod DTD, 2025-02-06_PPT_PFW2_SHFM13_02_2D_Modelling_N.Rosic.pdf*)

The presentation provided a detailed update on the progress of 2D modelling. A brief recap of the purpose of 2D modelling was given, emphasizing its role as a key tool in simulating morphological changes along the analysed section of Danube. The results of these simulations are used to evaluate different scenarios based on various criteria.

The dataset previously described by Romeo has been supplemented with additional documentation for calibration and verification. This includes hydrometric measurements taken in the confluence zone of the Drava River by Hidroing and the Faculty of Civil Engineering in Zagreb, conducted in September 2023. Furthermore, supplementary documentation from Plovput has been obtained to update the Digital Terrain Model (DTM).

To simulate changes in channel geometry, the model was implemented using the Basement 2D software package. The model for the analysed section of Danube consists of over 600,000 computational cells, created by defining their positions based on the DTM. A portion of the computational geometry was presented.

Model calibration was performed by comparing measured and calculated velocity and suspended sediment concentrations at the confluence of the Drava River. The results showed satisfactory agreement with measured values. One dataset was used for calibration, while another dataset from a separate measurement campaign was used for verification. Calibration was conducted using the recorded channel geometry, while verification relied on data from the second campaign.

The presentation also provided an overview of the scenarios and their calculated effects on channel geometry. The project aims to propose measures to improve navigation conditions based on a navigability analysis of the joint sector. Five sectors, extending from Apatin to Staklar, have been selected for further analysis and the development of proposed measures. Different approaches were used in defining the scenarios: Baseline Scenario, which serves as the reference for multi-criteria analysis (MCA) and represents a "do-nothing" approach, meaning no interventions, scenario 2 involves the introduction of structural measures, including two types of new river training structures and the excavation of two channels, with the primary objective of improving navigation conditions while maintaining or enhancing ecological indicators, scenario 3 focuses on fairway realignment to optimize navigation by modifying fairway characteristics (beginning, end of the curve as well as the radius of the curve), scenario 4 includes the formation of a channel, which inevitably means the partial or complete removal of some existing groynes. For Scenario 2, proposed measures include: chevrons, designed to deepen the channel and improve navigation by creating a deeper channel along the riverbank while enhancing morphological diversity, bottom sills, planned for deep zones along the left bank of the Danube near Apatin, aimed at stabilizing the riverbed and improving flow conditions within the fairway. The side arm opening, proposed for two sectors is expected to reduce flow velocity in key areas, thereby mitigating sediment load accumulation and improving navigation conditions, particularly near the confluence of the Drava River. These measures are expected to contribute to both improved navigability and ecological conditions.

The presentation continued with an explanation of the sidearm approach as a measure to improve navigation conditions, specifically in the Staklar sector. The same logic applies to the confluence of the Drava, where fairway realignment is also considered as a potential measure.

The fundamental concept behind this scenario involves numerical simulations of river flow and sediment transport using a calibrated model. The model follows the “do nothing” approach, meaning no direct interventions are made in the riverbed, but rather possibilities for fairway adjustments are analysed.

As this scenario is still under development, the sidearm opening approach is being explored in selected locations. The model investigates the effects of sidearm openings not with the explicit aim of reducing water velocity, but rather to increase sediment deposition along non-critical sections in the Danube riverbed, thus indirectly improving conditions in critical areas by redistributing flow and energy.

The Digital Terrain Model (DTM) of the riverbed has been created for the scenario involving measures.

Simulation results for the “do nothing” scenario at mean flow were presented. However, it was noted that the discharge used was higher than the actual mean flow discharge, which will ultimately be the basis for evaluation in the Multi-Criteria Analysis (MCA).

Next steps include finalization of Scenario 4, preparation of models for all four considered scenarios, result analysis, and application of the MCA.

Questions & Answers:

Q (Ms. Kerstin Böck, WWF Austria): I was wondering if there will be an opportunity for the Stakeholder forum to provide feedback on the scenarios when they are explained. It seems there has not yet been a step in the process where the scenarios were presented specifically for commenting. Could this be included?

Additionally, while it is important to consider navigational objectives, it is also essential, as outlined in the Platina Manual, to keep environmental objectives in mind. This balance should always be considered.

A (Mr. Nikola Rosić, Hidrozavod DTD): The project is seen as a preparatory phase, focusing on developing preparatory documentation. The primary goal is to analyze measures aimed at improving navigation. At the same time, ecological considerations remain a fundamental requirement. All measures will be analysed and evaluated within MCA, taking ecological criteria into account.

Q (Mr. Georg Rast, consultant): Was an investigation conducted to assess whether these side arms were truly sustainable and resistant to siltation? Had an alternative approach been considered, such as creating a side arms within the riverbed itself in the form of detached groins? Since the primary objective was to reduce pressure on the riverbed in that section and minimize sediment transport in the area, had this aspect been taken into account? How was the sustainability of the opening of side arms proven to ensure they did not silt up over time?

A (Mr. Nikola Rosić, Hidrozavod DTD): In some areas, this might be achieved by detaching the groins, leading to a reduction that could be more sustainable. In the model framework, siltation can be simulated under the chosen hydraulic conditions and will be analyzed. It is recognized that siltation can sometimes act as a sediment trap for the main channel, which is considered a desirable outcome.

Additional information (Mr. Zoran Rašić, TA): This discussion should move in a different direction at this moment. It is necessary to return to the basics-why this is being done and what the purpose of this navigation enhancement is. If transportation becomes 10 or 20 times more intensive severe problems with navigation will arise and everything being discussed now will lead to a completely different dimension. The goal is to invite all transport modalities to use the river and to reduce the number of trucks and other types of transport on the roads, as this represents a more sustainable alternative. This project and all comments should be viewed in this context, as considering this perspective is crucial when discussing ecology and the proposed measures. The proposed structural measures, since all others are more or less environmentally friendly, have largely moved away from traditional civil engineering concepts. The introduction of chevrons represents an abandonment of the river regulation approach used 30 or 50 years ago. It is important for Stakeholders to recognize these steps and efforts to implement sustainable solutions in this model development.

Q (Mr. Arno Mohl, WWF Austria): Regarding the structural measures, how was the expected deepening of the riverbed estimated, considering that two chevrons and additional groins or sills were proposed

at Apatin? Since this deepening raises significant environmental concerns in the floodplain area, an aspect not considered in the project and previously criticized, was its potential impact assessed? How was the issue of further deepening of the Danube and the measures that promote it, along with their effects on the wider floodplain area, addressed? Given that this environmental problem cannot be compensated by side-angle reconnections or downstream interventions, what kind of deepening was anticipated, and is the scale of the deepening already known? If the scale of deepening cannot be accurately modelled, how can the benefits for achieving mitigation be proven? How will the project demonstrate that the proposed measures will effectively mitigate the environmental impacts if the extent of deepening and erosion is not precisely predictable?

A (Mr. Nikola Rosić, Hidrozavod DTD): The effects will be analysed in a relative way, rather than in absolute terms. While hydrological and morphological conditions can be predicted as inputs, the analysis will focus on comparing the effects of measures with a "doing nothing" scenario. The extent of erosion is beyond the scope, as it is nearly impossible to predict. However, it can be expected that with certain measures, such as chevrons, erosion may increase—but all effects will be evaluated in the MCA at the end. The goal is to improve morphological diversity by introducing such measures, and it's not a straightforward cause-effect relationship. Erosion and deposition are part of the dynamic nature of the river system, and while erosion is dominant in this sector, its extent were analyzed based on the documentation received. The analysis will focus on dominant morphological alterations, such as changes in geometry for the fully analysed river reach, based on dominant discharge or channel-forming discharge. As engineers, we can evaluate the variants and determine which measures will have a greater or lesser impact. The difference will be assessed using standard engineering tools and practices. We are adopting conditions, such as channel-forming discharge, which will be used in the simulation. While this may not be a completely realistic representation of what will actually happen, it is the most realistic model we can create.

Q (Mr. Neven Trenc, Ministry of Economy and Sustainable Development): If we consider all the concerns regarding sustainability and alternatives for transportation, especially in relation to the ecological network and the threat to biodiversity, we are planning a project that could have negative effects on the Natura 2000. This would be done with the intention of overriding the public interest. However, it seems that the goal should be to mitigate the effects and design a project that does not have a significant negative impact on the Natura 2000. Addressing all these concerns would ultimately lead to a better project. To emphasize this, I would like to refer to the European Commission's guidelines on inland waterways development, which should be taken into consideration. Although things are changing, this guidance is still valid. If there are better approaches or methods to be used, they should be integrated into the project. While chevrons may not always be ideal, it is important to explore new methods, verify their applicability, and address why certain decisions are made. The focus should be on finding solutions that are functional and sustainable, not just aesthetically pleasing. Deepening, as a primary concern, cannot be underestimated and should be assessed thoroughly. Additionally, I recommend reviewing previous studies conducted for the mouth of the Drava, particularly regarding issues that arose in the past. If similar models and plans are being used again, it would be prudent to learn from previous experiences and aim for modern, more effective solutions. There are concerns regarding the periodic river bar at the mouth of the Drava, which shifts the flow of the river. Whether this event is extreme or a normal occurrence, it should also be considered when planning for the future.

A (Mr. Nikola Rosić, Hidrozavod DTD): Analysis of previous documentation has led to the development of a novel methodology. This adopted methodology integrates relevant documents and strategic decisions within the MCA evaluation, considering different scenarios. As mentioned, a channel-forming discharge has been adopted, considered dominant from this perspective and seen as the best choice. However, hydrological and water conditions change over time, and a more detailed analysis should include different types of discharge. While the current modelling framework is being maintained, it is important to note the absence of inundation data in the model, which represents a significant limitation in fully understanding the overall effects of the solutions.

Q (Mr. Neven Trenc, Ministry of Economy and Sustainable Development): Since everything is interconnected, how were the potential impacts on protected areas along both sides of the Danube taken into account? Given the strict water level conditions in these areas, was it assessed whether they would be sufficient to mitigate any negative effects?

Considering that water connections in such fragile ecosystems can significantly alter the entire system, how was this risk addressed? Extreme conditions may play a role, but ecological networks remain a

critical factor. How was this aspect carefully evaluated within the project? Since certain issues cannot be fully addressed within the project's modelling framework, how will these limitations be documented and taken into consideration as key concerns?

A (Mr. Nikola Rosić, Hidrozavod DTD): As agreed, recommendations will be added for aspects that cannot be addressed within the current project.

Q (Mr. Tibor Mikuška, Croatian Society for Bird and Nature Protection): When developing a navigation project, how do you ensure compliance with both national and international legislation, considering it is a complex and sensitive matter? Additionally, how do you incorporate environmental needs into the project, and how do you follow the guidelines and documents that are specifically prepared to aid your work? One document, which was shared by Neven, has already been provided, and I will also share another one (Natura 2000 and PLATINA Manual). Please make sure to review these documents, as they are essential to be followed step by step. I would also like to know how these documents are being incorporated into your planning process. Furthermore, could you elaborate on how you plan to address the misunderstandings related to navigation and the environment, which have been complicating this project? Finally, regarding the scenarios, I would like to request that you provide all the maps, kilometer by kilometer, for the post-trench section from Apatin to Erdut, to better understand the geographic scenario.

A (Mr. Nikola Rosić, Hidrozavod DTD): Regarding the reference, the solution will be analysed. The main desirable effect is not only on the deepening of the main channel but also on its formation, aiming to further improve navigational conditions.

Additional information (Mr. Romeo Soare, Hidrozavod DTD): The objective of the project is not to deepen the fairway area, but rather to reinstate the navigation conditions. We aim to address sedimentation issues within the fairway area. The proposed solution will fully comply with European legislation, specifically following the Platina Manual recommendation and the applicable European navigation requirements. Furthermore, it will ensure that environmental factors are balanced in line with the Water Framework Directive and other relevant European environmental directives.

Q (Mr. Neven Trenc, Ministry of Economy and Sustainable Development): I don't believe we are conducting the appropriate assessment. However, the objective is to develop a solution that is feasible and can be implemented within the framework of the Natura 2000 and Water Framework Directive. I understand your concern. We are not performing the appropriate assessment study, but then, what is the goal? Should we aim for an ideal technical solution that is ultimately not implementable?

A (Mr. Romeo Soare, Hidrozavod DTD): The goal is not to find a solution for fairway deepening. Instead, the focus is on providing navigation conditions that align with the Danube Commission's recommendations and European navigation requirements, in accordance with all relevant European environmental directives, including the Water Framework Directive. The goal is to find the best solution according to the criteria defined in the adopted methodology for the Multi-Criteria Analysis (MCA). The conditions for navigation and relevant reference documents were discussed in detail under Activity 3.

Additional information (Ms. Jasna Muškatirović, Danube Commission): The Danube Commission's recommendations are well-defined, and we cannot deviate from them. If the recommendations specify a certain width and depth, that is the standard. This is not only based on the Danube Commission's recommendations, but also on United Nations documents, including AGN, which all the countries involved have signed and accepted, agreeing on similar or identical parameters. Therefore, there is no need to discuss narrowing the fairway to 100 meters.

Q (Mr. Tibor Mikuška, Croatian Society for Bird and Nature Protection): The issue is not with the Danube Commission's recommendations, but rather with the approach taken in the project. In the 21st century, navigation projects cannot be developed solely from a navigation perspective. As outlined in the relevant guidelines, all other users' needs, including environmental considerations, must be taken into account and addressed. This has not been done in the current project, as the consultants are adhering strictly to the terms of reference and focusing only on navigation issues. This narrow approach will ultimately lead to a dead end, and the project will not be funded by the European Union, as it does not consider all relevant needs, particularly environmental ones. To move forward, the project must adopt an integrative approach, and this has already been pointed out in the MCA comments. The current approach, focused solely on navigation conditions, is the wrong way to proceed.

Additional information (Mr. Siniša Špegar, TA): While environmental considerations are important and will be integrated into the project, the primary focus remains on meeting the necessary standards. However, if the project continues with its current approach, there is a real risk that it will not be financed by the European Union. If that happens, we will have to revert to the do nothing approach.

Additional information (Ms. Marina Ilić, chairperson): There are many environmental issues that need to be addressed, and these must be analysed in detail. The consultants have taken into account the relevant guidelines in the Platina Manual, but this is just the first step of the project preparation phase-modelling. Their final report will outline recommendations for the next steps, including what needs further analysis. While the current scenario might not address all environmental issues in detail, it is a starting point for further development. The modelling process includes the MCA, which does consider environmental criteria. However, the detailed environmental assessments required, including an appropriate assessment, are not part of this project's scope—they will be tackled in the next stage. Additionally, the proposed scenarios must comply with national and international legislation, which ensures they're aligned with the regulatory framework. We need to acknowledge that not every issue can be solved or fully addressed in this phase, and that further analysis will be necessary as the project progresses. It's important to identify what remains unresolved in this project and what will need further attention in the next steps.

Q (Mr. Neven Trenc, Ministry of Economy and Sustainable Development): We need to be clear about the scope of the project and what falls outside it. If we're developing scenarios, it's essential to understand what we're including in these scenarios and why. The concern is that, if the model is misleading and doesn't address its limitations, we risk undermining the project's credibility. It could lead to confusion among the public and stakeholders and hinder future funding. The consultants may complete their work, and while the model might look good on paper, the solution may not hold up when it's tested in practice. I think it's important for us to ensure that the project is done as thoroughly as possible, rather than taking a rigid approach that excludes necessary elements just because they don't fall neatly into the defined scope.

I fully appreciate the efforts to engage with nature and environmental concerns. The work we've done so far, particularly the stakeholder forum, is invaluable, and it's a unique process that's been done for the first time. In the end, it's important to ensure that the outcome of this forum and the project itself reflect the best possible solution, and that we are all comfortable with the direction it's headed.

A (Mr. Nikola Rosić, Hidrozavod DTD): It's important to remember that we have a level of nature protection specified in MCA report or concerns you refer to regarding EU legislation will be addressed carefully. If there's any issue that conflicts with EU legislation, please be specific, and we will make sure it is properly considered.

Additional information (Mr. Arno Mohl, WWF Austria): I believe we are currently in a dilemma because the project began with certain expectations that, at this stage, cannot be fulfilled. What we are discussing now is an integrated approach for the project, but as the project was originally structured, it is not capable of meeting these expectations. This creates a dilemma that we are now working through. However, when considering the benefits of the project, it becomes very clear that the transboundary cooperation that has been initiated between the two countries, along with key Stakeholders, is of significant value and importance.

A considerable amount of data has been collected and numerous issues have been addressed. Yet, the key question, Marina, is what the next step should be. From my perspective, the logical next step would be to draw a conclusion: what has been achieved within this project, and where are the gaps? For the next phase, an integrated approach needs to be initiated, one that takes into account course and management goals. As we've discussed multiple times, we have developed a Platina Manual, but I don't believe it has been fully implemented within this project.

What I want to emphasize is that this is not a waste of time; the project has reached a certain level, but it has not accomplished what we ultimately need to achieve. What should not be done now is proceeding with an appropriate assessment, as this is the final step once an agreement is made on the type of project. Moving into an appropriate assessment at this stage will fail, as it does not fully address environmental concerns nor align with the environmental expectations of such a project. This is the major gap, as Tibor mentioned. Without addressing these environmental issues, EU funding for the project will be at risk, as these questions will be raised, and if the project cannot meet these requirements, it will not be funded.

It is important to have a clear conclusion on the next steps and approach, and there is a wealth of experience within this consortium. Viadonau, for example, has been practicing integrated projects for decades, and with the local expertise from the countries involved, I believe we can make significant progress on the next step. This will be a more satisfying path for all of us.

Additional information (Mr. Gert-Jan Muilerman, viadonau): Regarding the analysis provided by Arno, I would like to add that I see this as a very important exercise conducted within the framework of this contract and the project (activities related to the common Croatian-Serbian Danube section) itself. However, I believe the most crucial aspect at this stage is to make an honest assessment of the limitations of the project and provide recommendations for future steps.

I consider this to be the primary added value at this point, to bring the project to a conclusion while also looking ahead. Indeed, we should aim to develop a project that, from the outset, clearly defines both environmental and navigational goals within a single project design. Therefore, the scope of the project should be broader than what could have been achieved within the current framework of the project. My main recommendation, as I mentioned, is to include a honest evaluation of the study's limitations, ensuring that we do not raise expectations beyond what is realistically achievable.

Additional information (Mr. Neven Trenc, Ministry of Economy and Sustainable Development): It seems like the project is mainly technical at the moment, with research and modelling already done, but now there's a need to add an environmental aspect, especially related to Natura 2000. If there are enough funds, it would be beneficial to include an additional document or expansion that clearly outlines the environmental challenges and next steps. It sounds like this could be added by consulting experts who specialize in environmental aspects. This is something for the consultant to address, and additional expertise will definitely be required for incorporating those environmental considerations into the project effectively.

River Basin Management Plan on the territory of the Republic of Serbia by 2027 (*Gordana Špegar, Ministry of Agriculture, Forestry, and Water Management Republic Directorate for Water, 2025-02-06_PPT-EXT_SHFM13_03_RBMP_RS_by_2027_G.Spegar.pdf*)

The presentation discusses the development of the River Basin Management Plan (RBMP) for the Republic of Serbia, covering the period until 2027. This plan, which is the first of its kind for the country, is designed to implement the principles of the EU Water Framework Directive (WFD) and serves as a strategic framework for integrated water management.

The Water Framework Directive, in effect since 2000, aims to establish a comprehensive approach to water protection, with the main objective being to achieve and maintain a good status for all water bodies through the implementation of a program of measures. The plan, developed by public water management companies "Srbijavode" and "Vode Vojvodine" in collaboration with the Ministry and other relevant institutions, aligns with national laws and international agreements, particularly those related to EU directives.

The preparation of the plan was supported by the EU-funded project "Support to policy planning in the water management sector", focused on capacity building. The plan, while currently only available in Serbian, is in accordance with the content requirements of the WFD and covers various chapters such as river basin characterization, pressure and risk analysis, status of water bodies, and proposed measures.

A key element of the plan is the delineation of surface and groundwater bodies, which included identifying natural, heavily modified, and artificial water bodies. This process resulted in the identification of 3,216 surface water bodies and 153 groundwater bodies. The delineation is based on factors such as typology, natural characteristics, hydromorphological pressures, and water quality.

The plan also identifies five significant water management issues: pollution by organic substances, nutrients, hazardous substances, hydromorphological alterations, and groundwater obstructions. These issues were evaluated through pressure and impact analyses, which highlighted the need for specific measures to address these challenges.

A program of measures has been proposed to tackle the identified issues. The program includes both basic measures, which are required by the EU directives, and complementary measures, which are necessary when basic measures alone are insufficient to achieve the environmental objectives. The implementation of these measures will be phased over multiple planning cycles, starting with the first cycle ending in 2027. However, full implementation within this cycle may not be feasible due to data gaps, insufficient monitoring, and limited human and financial resources.



Public participation was an integral part of the planning process, conducted in accordance with the WFD and international regulations, including consultations with neighbouring countries.



Next steps & AOB

- The next (14) SHFM on **25th March** (and agreeing on the dynamic of holding the next SHFM depending on the results achieved and the need for discussion)

Upcoming Meetings

Meeting	Date / time	Place
Stakeholder Forum Meeting #1	25 th March 2025	Online

Attachments

- List of participants (separate file)
- Presentations (Stakeholder Forum website: <https://www.viadonau.org/en/company/project-database/preparing-fairway-2-works-in-the-rhine-danube-corridor-study/stakeholder-forum>)