

Preparing FAIRway 2 works in the Rhine-Danube corridor

MINUTES (final)

Stakeholders' Forum Meeting 16 (SHFM16)

Date	18.06.2025
Time	10:30 – 14:00
Place	Online meeting (Google Meet): https://meet.google.com/hjs-yqpc-zen
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 16th Stakeholder Forum meeting for the Project "Preparing FAIRway 2 Works in the Rhine-Danube Corridor" highlighting the project's approaching final phase and the importance of reflecting on progress and upcoming steps. 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 emphasizing its role in supporting joint sector activities on the Danube between Serbia and Croatia, within the FAIRway 2 project under the CEF framework. Although the formal contract between MGSI and the consultant had officially ended, it was recently extended until 1 August 2025, with ongoing work focused on finalizing Output 4.3 Technical report on 2D modelling and application of MCA and Output 5.1 Integrated study on alternative solutions.

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

Inland waterway classification in reference to the Danube's one-way navigation issue

(Ljubiša Mihajlović, Plovput, 2025-06-18 -
_Inland_waterway_classification_in_reference_to_the_Danube_s_one-way_navigation_issue)

The presentation provided a comprehensive overview of European inland waterway classification systems, specifically those developed by ECMT, UNECE, and PIANC, underlining their significance in aligning technical standards across the globe. It was emphasized that the Danube stretch between Bezdan and Bačka Palanka is classified as Class VIC, which permits navigation of convoys up to 280 meters in length.

A key part of the presentation focused on the identification of both basic and strategic bottlenecks along the Danube, with special attention given to critical sectors selected for potential interventions. In this context, the technical recommendations of the Danube Commission were highlighted as a valuable reference point for the planning and maintenance of waterways, although it was noted that these recommendations are not legally binding.

The technical framework adopted in the project was also presented, including parameters such as minimum navigation depth, fairway width, and curve radius. The concept of one-way navigation was introduced as a specific traffic regime, allowing vessels to move in only one direction at a time within a river section, while temporarily halting movement in the opposite direction.

However, the presentation clearly outlined the substantial limitations of applying such a navigation regime to the Danube. One-way navigation was shown to significantly reduce transport efficiency by causing delays, vessel queuing, and extended travel times. This inefficiency is further compounded by increased operational costs, higher fuel consumption, greater insurance demands, and lower vessel turnover, all of which undermine the competitiveness of inland waterway transport. Moreover, managing one-way traffic requires complex coordination and additional infrastructure, placing further strain on resources.

From a broader perspective, the implementation of one-way navigation has a detrimental effect on strategic transport corridors and weakens the reliability of the overall logistics chain. It also proves to be insufficiently resilient in crisis situations and fails to meet the commercial sector's need for predictability and continuity in navigation.

The legal framework governing inland navigation was also addressed, including the AGN Agreement, the Danube Commission's technical guidelines, and the 1948 Belgrade Convention all of which clearly mandate two-way navigation for waterways classified as Class VIB and above.

In conclusion, the presentation emphasized that while one way navigation may be used as a short term, exceptional measure under specific conditions, it cannot be considered a viable or sustainable long term solution for the Danube.

Questions & Answers:

Summary of the Discussion

Mr. Tibor Mikuška (Croatian Society for Bird and Nature Protection) initiated the discussion by raising the possibility of using one-way navigation as a temporary measure in critical sectors, clarifying that it was not intended as a permanent solution for the entire stretch. He also inquired about the formal procedure required for reclassifying inland waterways under the AGN Agreement, suggesting that a lower classification could potentially ease certain navigational constraints.

In response, Mr. Ljubiša Mihajlović (Directorate for Inland Waterways) explained that one-way navigation had been presented as a possible short-term solution under exceptional circumstances such as infrastructure works, extreme low water levels, or mobile sandbars. However, due to diverging stakeholder views, it was necessary to elaborate its broader implications. He emphasized that such a regime is not compatible with the long-term goals of the TEN-T network or the AGN Agreement, which stipulate two-way navigation for Class 6B waterways and above. He further clarified that reclassification of the Danube waterway is a complex and lengthy process that must be approved at the European level and cannot be initiated unilaterally by national authorities.

Mr. Arno Mohl (WWF Austria) questioned whether the relatively low current traffic volumes on this stretch could justify temporary one-way navigation, and asked for clarification on the economic arguments against it. In response, it was explained that planning must be based on expected future demand and historical trends, not only on present usage. Regulatory obligations and long-term transport strategy require continuity and predictability.

It was additionally noted that, while the Danube appears wide in certain sectors, introducing one-way navigation effectively reduces usable navigable width, which could in extreme cases lead to temporary closure of the fairway. Therefore, one-way navigation is seen strictly as an emergency measure, not a long-term alternative.

Mr. Gert-Jan Muilerman (viaDonau) highlighted safety concerns, recalling that temporary one-way regimes in past emergency situations (e.g., near Vienna) led to increased vulnerability to accidents and required costly emergency dredging. He stressed that ensuring navigational safety and resilience must remain a priority, alongside minimizing environmental impact.

Mr. Georg Rast (consultant) warned against considering the Serbian-Croatian section in isolation and asked for clarification on the classification of the Danube in Hungary. It was confirmed that the Hungarian stretch of the Danube is classified as Class 6C, with some sections as 6B, aligning with the downstream section.

Mr. Nikola Rosic (Hidrozavod DTD) added that downstream convoys can reach up to 300 meters, while upstream traffic is limited to 225 meters, reflecting the reduction of one vessel row due to flow resistance. He emphasized that planning must also include economic and social dimensions, not just hydrological or navigational factors.

Modelling & Multi-Criteria Analysis of the common Danube section

Application of Multi Criteria Analysis (Nikola Rosic, Hidrozavod DTD,
Preparing FAIRway 2 works in the Rhine Danube Corridor/Hidrozavod_Application_of_MCA_final_2.pdf)

A summary of previous modelling activities was presented and key findings from Output 4.3 Technical report on 2D modelling and application of MCA, focusing on low flow conditions and scenario-based evaluation. It was noted that under minimum flow conditions (30-day discharge with 95% exceedance), slightly improved water depths were observed, particularly near the Drava confluence, with water levels reaching approximately 3 meters (ENR level).

Environmental indicators were assessed across four scenarios, covering hydromorphology and biotic elements (birds, fish, flora). Scenarios 2 and 4 showed positive hydromorphological developments, such as increased channel diversity, while Scenario 4 received lower environmental scores due to the inclusion of multiple new structures within a protected area.

Scenarios involving chevrons (2 and 4) were shown to generate additional flow channels at low water levels, potentially improving habitats for aquatic and bird species. However, near-bank velocity and shear stress analysis did not reveal significant variations between scenarios, indicating low erosion risk.

The multi criteria analysis included technical and financial criteria, highlighting that Scenarios 3 and 4 performed best in terms of cost-effectiveness, due to potential dredging cost reductions. Scenario 4 ranked highest in terms of sustainability and navigability, Scenario 2 was identified as the most environmentally beneficial, and Scenario 3 as the most feasible and resilient to climate change.

Ecological assessments were based on available GIS layers databases, expert judgment, and national monitoring data.

Questions & Answers:

Mr. Georg Rast (consultant) inquired about the depth of the proposed sidearms relative to low and navigable water levels, noting that only widths had been presented. Mr. Nikola Rosić (Hidrozavod DTD) clarified that the sidearms reach a maximum depth of about 3 meters and a width of 60 meters, corresponding to low flow conditions with a 95% exceedance probability, slightly above the minimum navigable level at the Drava confluence.

Ms. Kerstin Bock (WWF Austria) asked about data supporting the ecological impact assessment in Scenario 2. The project team, including Ms. Vesna Djikanović (Hidrozavod DTD), explained that no specific monitoring data is available; impact scores rely on expert judgment, GIS databases, and national monitoring data without quantitative thresholds, as detailed in the project report.

Mr. Tibor Mikuška strongly criticized the environmental criteria results, particularly regarding dredging of side channels like the Aljmaš sector. He argued that conclusions of positive impacts on habitats such as alluvial forests and natural lakes are flawed, as these habitats depend on shallow, stagnant waters not present in deep dredged channels. He highlighted that the existing side channel acts as a sediment trap supporting gradual forest growth, which steady flows from dredging may disrupt. He further questioned the short-term modeling focus, emphasizing that ecological benefits emerge over decades and are influenced by complex sedimentation and flood processes not captured in current models. Mr. Mikuška also noted the lack of empirical data backing positive ecological outcomes from dredging, stating that side channel opening typically increases flow velocity and erosion, historically causing habitat loss.

He rejected the notion that fish and birds will simply relocate, stressing limited habitats for endangered species and the negative impact of disturbances. He underscored the critical role of habitat creation and protection for conservation.

Consultants acknowledged these concerns and the risk of anthropogenic impacts, aiming to balance navigation and habitat protection, though comprehensive monitoring and habitat modeling are beyond the project scope. Mr. Mikuška concluded that current environmental impact claims lack scientific robustness and cited similar expert concerns from Austria.

Next steps & AOB

- Stakeholder Forum meetings planning for 2025

Following the discussions among participants at the Forum, it has been decided that the next meeting will take place on **16th of July 2025**.

- Preliminary MCA results for Scenario 3 were shared on 11 June. An extension of the MCA comment deadline to the end of June is proposed to allow thorough stakeholder engagement and discussion.
- Supplementary documentation with tracked changes and accompanying drawings will be provided to facilitate stakeholder review.

Upcoming Meetings

Meeting	Date / time	Place
Stakeholder Forum Meeting #17	16 July	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>)