

FAST DANUBE 2

Improvement of Navigation Conditions on the Romanian-Bulgarian Common Sector of the Danube



Co-financed by the European Union
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Joint workshop on waterway management of
EUSDR/ PA 1a and the Danube Commission

04.03.2025, Budapest

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- **Project name:** Improvement of Navigation Conditions on the Romanian Bulgarian Common Sector of the Danube
- **Project acronym:** FAST DANUBE 2
- **Type of action:** CEF Infrastructure Projects
- **Project starting date:** 1 April 2024
- **Project end date:** 31 December 2028



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PARTNERS

- **AFDJ** - REGIA AUTONOMA ADMINISTRATIA FLUVIALA A DUNARII DE JOS GALATI
- Project leader
- **EAEMDR** - EXECUTIVE AGENCY FOR EXPLORATION AND MAINTENANCE OF THE DANUBE - Beneficiar
- **MTC** - MINISTERSTVO NA TRANSPORTA I SAOBSHTENIYATA
- **PROJECT BUDGET – 229.999.786 EUR**
 - AFDJ - 118 168 365.00 EUR
 - EAEMDR - 111 213 416.00 EUR
 - MTC - 618 005.00 EUR

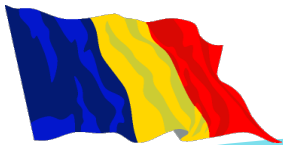
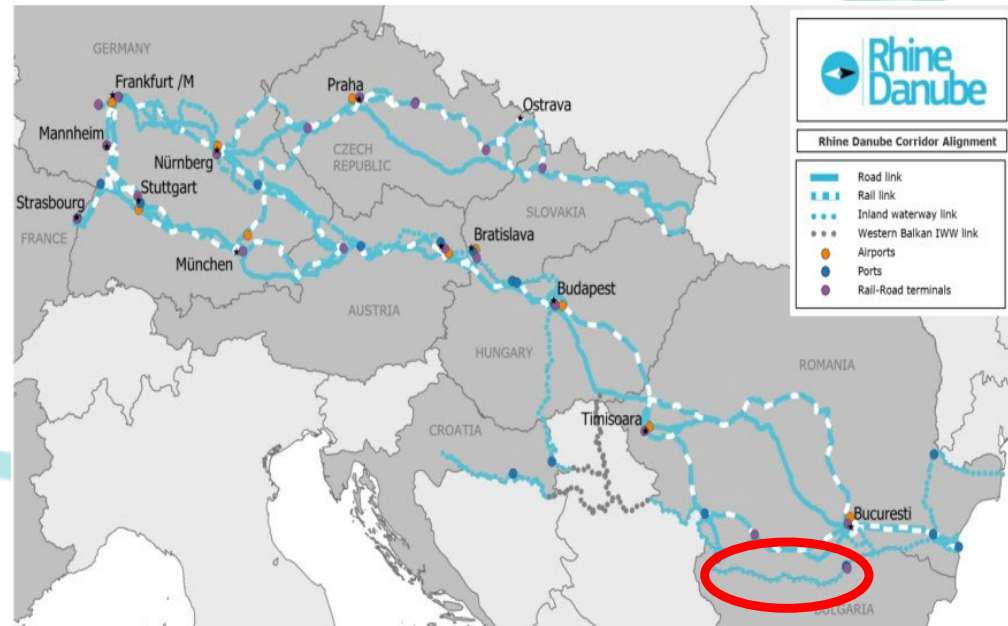


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The Romanian-Bulgarian common sector is the longest cross border sector of the Danube, around 470 km, where the minimum fairway parameters according to Danube Commission recommendations are not met all year around, even if an important effort is done for the fairway maintenance and, therefore, the works for ensuring a 'Good Navigation Status' are necessary.



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FAST Danube 2 is a cross-border project involving Romania and Republic of Bulgaria. It aims to ensure compliance with the requirements for inland waterway transport infrastructure along the Danube.

The goal is to address navigational challenges and bottlenecks. These issues have led to disruptions in navigation and financial losses for the transport sector due to inadequate navigation conditions, especially during low water level periods.

Therefore, the core objectives of the project include enhancing navigation conditions, eliminating navigational blockages, ensuring year-round navigability, and boosting connectivity between TEN-T network points.

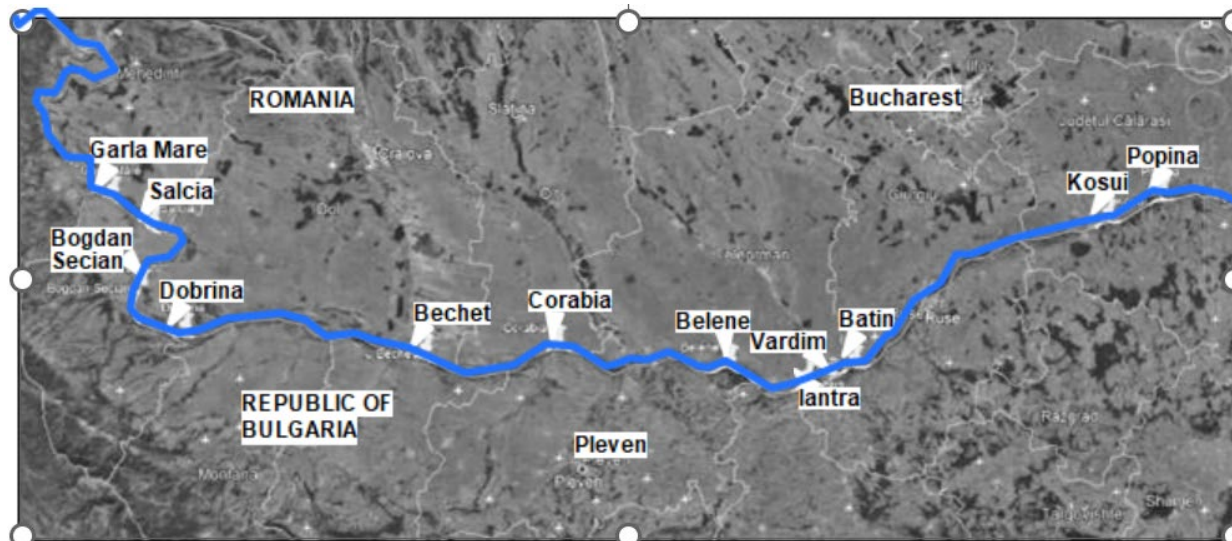


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The Project consists in design and execution of works in 12 critical areas along the Danube sector, accompanied by supervision services and environmental monitoring services in accordance with the requirement of the Environment Protection responsible bodies.



The 12 critical areas are equally distributed on Romania and Bulgaria territories.



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The FAST DANUBE 2 project involves the following activities:

Organizing the Joint procurement procedure and signing the Environmental Monitoring Contract

The procurement procedure will be carried out by AFDJ, as the procurement leader.

The environmental monitoring contract is in accordance with the recommendations of the Environmental Decisions issued by the two countries.

Within the environmental monitoring contract, a first stage is the performance of field studies and investigations to establish the baseline, before the start of the works execution.



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The following will be monitored:

- River morphology
- Hydrodynamic parameters of the water flow
- Sediment characteristics
- Geotechnical parameters for the Danube riverbed and banks
- Physico-chemical parameters: water turbidity, oxygenation conditions, nutrients.
- Specific non-synthetic pollutants - metals: Cu, Zn, As, Cr.



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The following will be monitored:

- Biological parameters: phytoplankton, phytobenthos, macrophytes, benthic invertebrate fauna, etc.
- Chemical parameters: Hg, Pb, Ni, Cd
- Parameters of biodiversity potentially affected by works to improve navigation conditions

The monitoring program will be carried out 2 years before the start the works, during the execution of the works (3 years) and 2 years after the completion of the project.

Currently, steps are being taken to sign the Joint Procurement Agreement between the two partners (AFDJ & IAPPD).



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In parallel with the environmental monitoring, measurements, studies and investigations will be carried out to acquire the data necessary for the preparation of the technical project.

These measurements will be carried out within the framework of the contract for design and execution of works, as a result of a joint procurement carried out by AFDJ, as the leader of the joint procurement.



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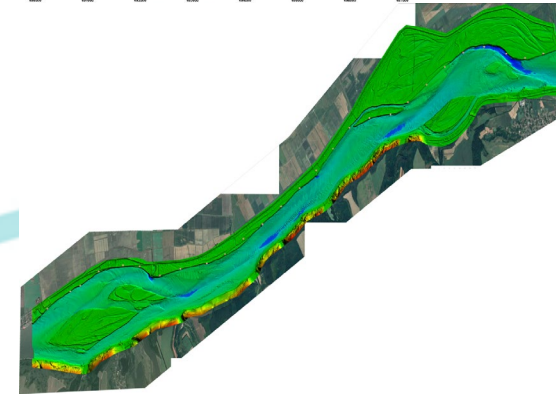
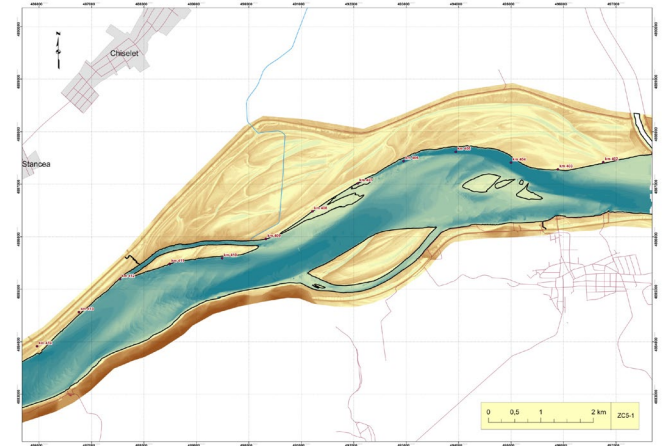
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The following surveys will be carried out:

- bathymetric
- hydrodynamic
- geotechnical
- sediment measurements

Geotechnical investigations will be carried out to determine the physical and mechanical characteristics of the banks and bed of the Danube, for the locations where engineering structures will be built and for the identification and dimensioning of landslides and bank erosion.



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In accordance with the Environmental Decision issued in the Republic of Bulgaria, a sensor network will be developed for 24/7 monitoring of landslides and bank erosion phenomena.

The report prepared by the Geological Institute of the Bulgarian Academy of Sciences, based on a contract concluded between the Institute and the Ministry of Regional Development was received

The report indicates the volume and extent of the additional investigations and design of the works required for mitigate the risks of landslides and erosion on the bank of the BG

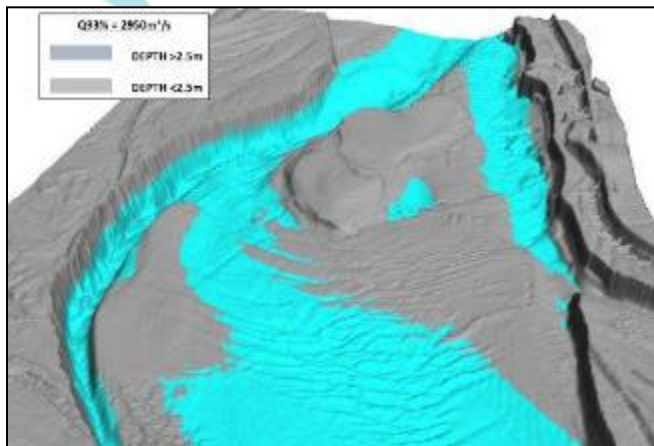


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- 2D & 3D numerical models will be developed.
- Following the development of the detailed technical project, steps will be taken to obtain building permits from both the Romanian and Bulgarian authorities.



- In accordance with the provisions of the GA, the design and construction contract should be signed by 31.08.2025.
- Currently, steps are being taken to sign the Joint Procurement Agreement between the two partners AFDJ & IAPPD.



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Works execution

The Project includes the following works for improvement of the fairway conditions:

- Dredging works in 12 critical locations (110 km in total)
- Bank stabilization in 3 locations (5.45 km in total)
- Groynes for limiting the movement of sediments, in 3 critical locations (Belene, Bechet, Popina – 2.6 km in total);
- Chevrons to modify the hydraulic flow and sediment response of the river, in 3 critical locations (Belene, Bechet, Popina – 1.9 km);
- Artificial island to modify the hydraulic flow and sediment response of the river along the envisaged river section in 1 critical location (1.2 million cubic meters).



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Proposed works:

- **Capital dredging works** in all 12 critical locations, of up to 3.5m depth below ENR are proposed across the width of 180m on the existing fairway route; or, in some cases, on a realigned fairway route, adapted to the natural evolution of the river in that section. Dredged material will be disposed of in special designated disposal areas, subject to authorities' approval. The locations carefully chosen giving regards to the existing environment and to naturally integrate with the characteristics of the flow and the riverbed morphology.
- **River training structures:** in 3 critical locations: Bechet, Belene, Popina

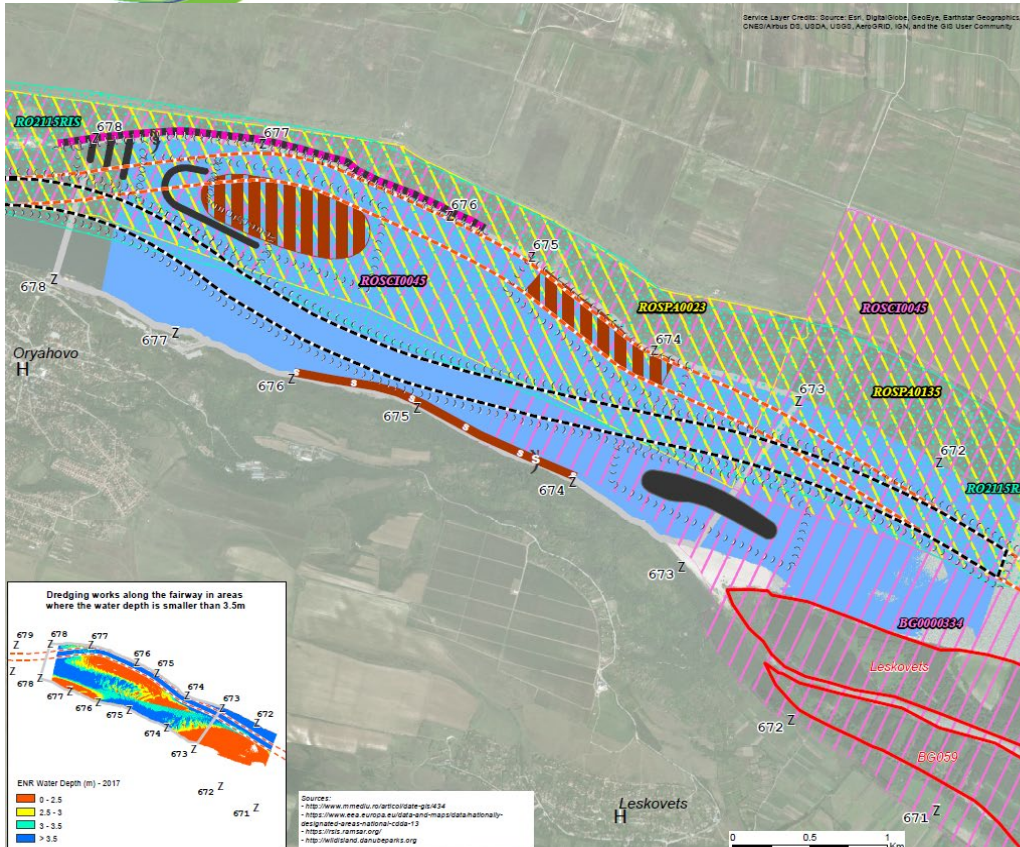


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BECHET – Critical point



- Three groynes on Romanian bank
- Chevron (U-shaped dike) near km 678
- Artificial island by building a protection 'nose' (u-shaped type structure) upstream at km 673.6
- Bank protection on Romanian side, from km678.2 to km674



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BECHET – Critical point



→ Fairway realignment over ~7.4 km to reinstate the fairway trajectory

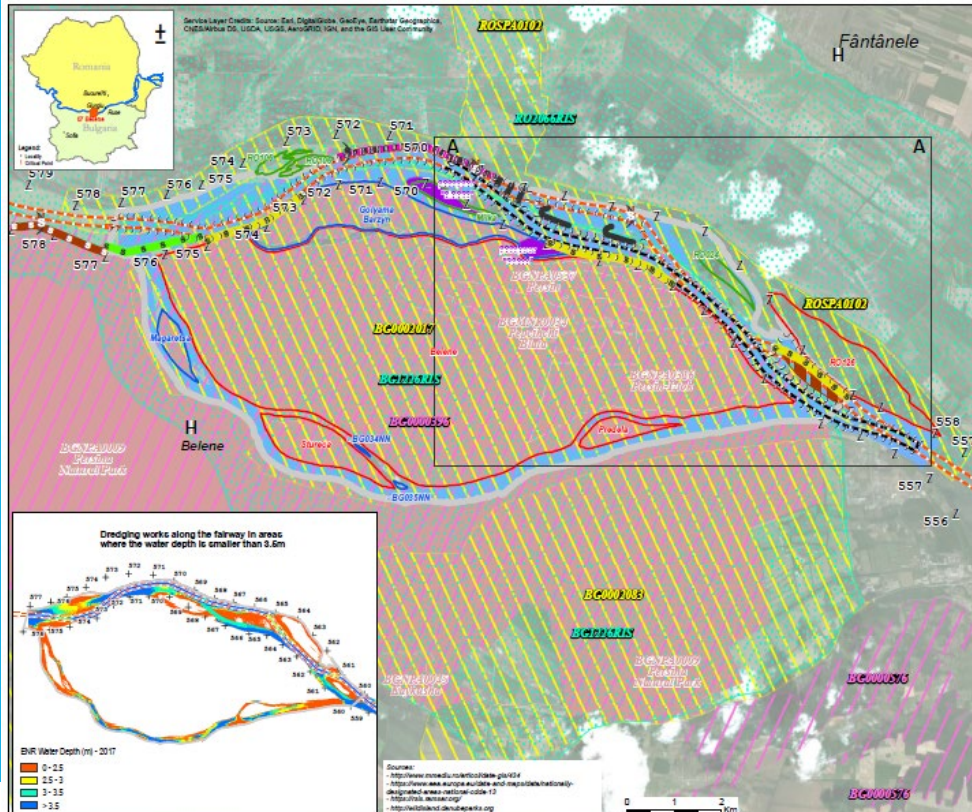


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BELENE – Critical point



- Three groynes on Romanian bank upstream of km568, up to km568.5
- Two chevrons from km568.5 to km565.8; ~1500m distance between them
- Bank protection on Romanian side from km569.9 to km568.5

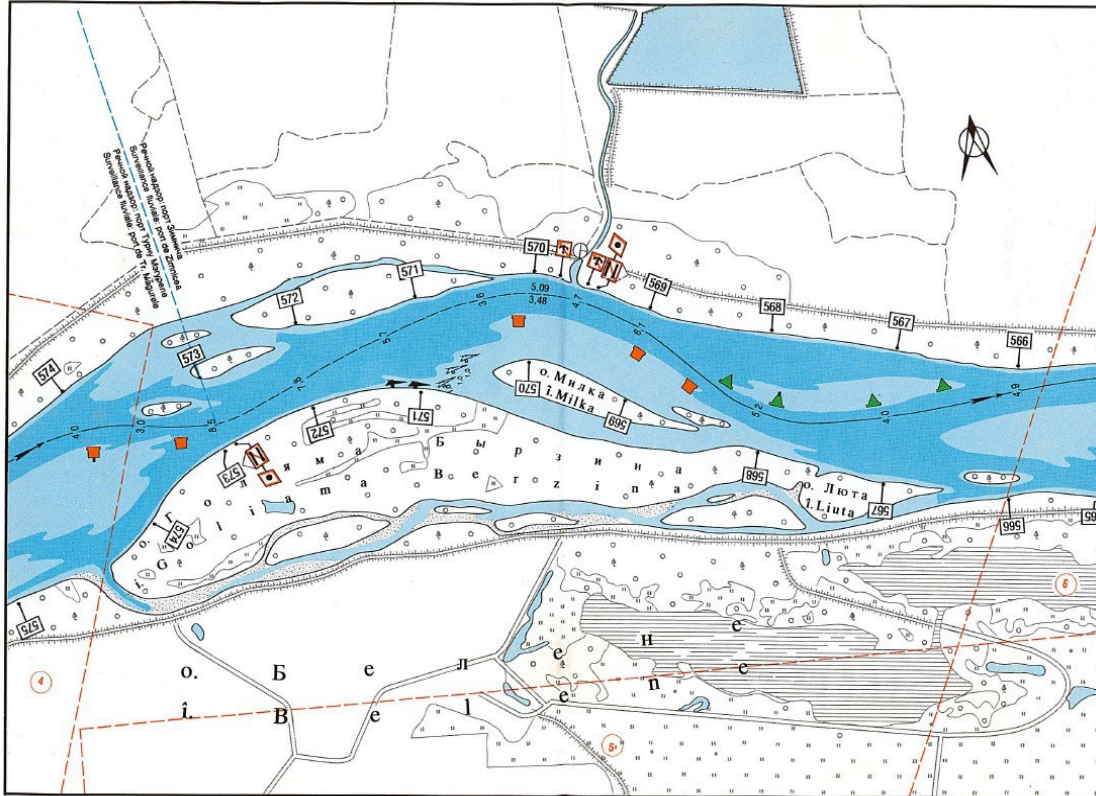


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BELENE – Critical point



Realignment of fairway in two areas from:

- km569 to 564;
- km561.5 to 556.7.

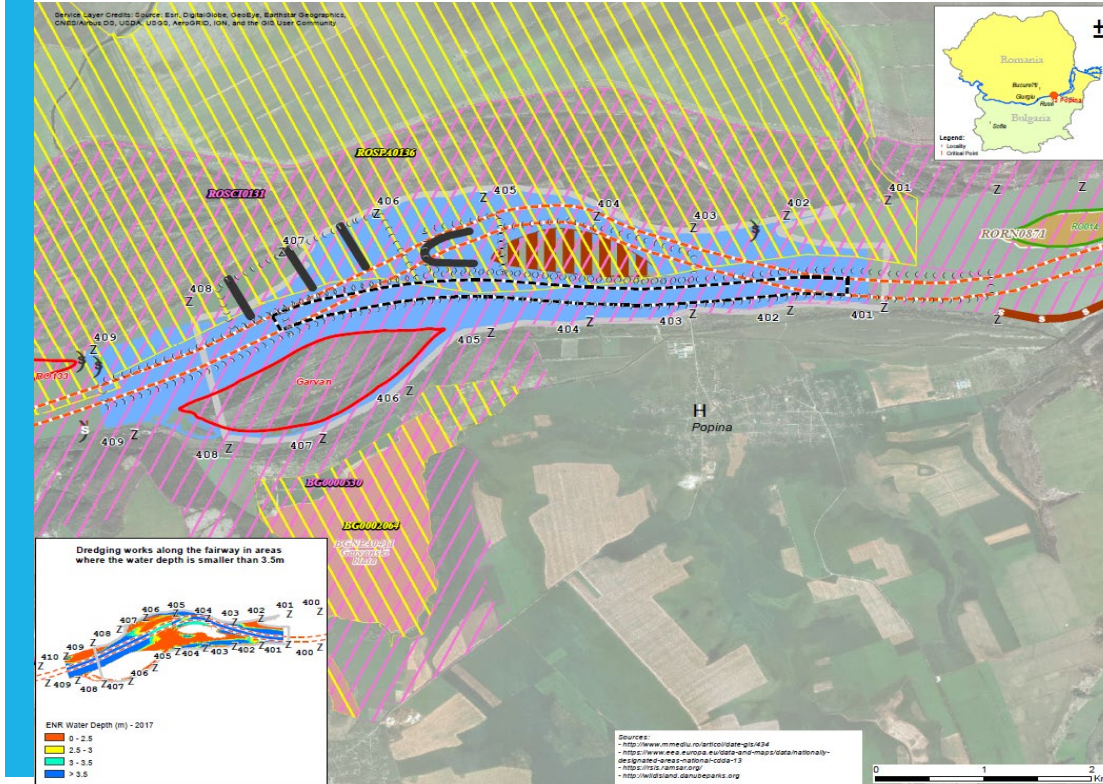


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POPINA – Critical point



- Three groynes on Romanian bank from km407.5 to km406.5
- One chevron upstream of km405

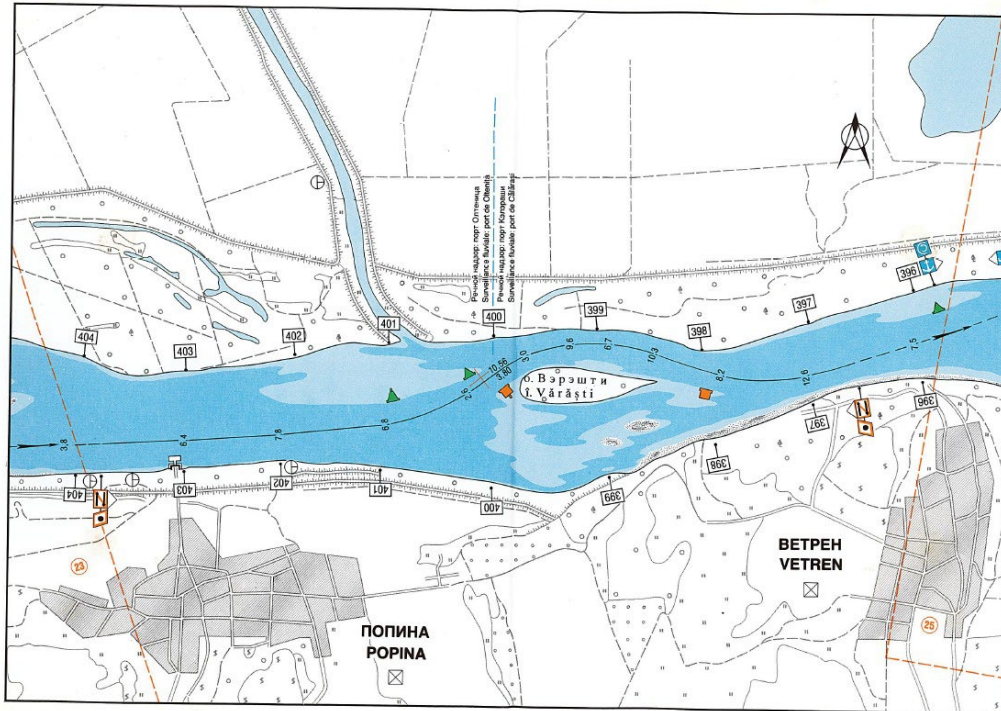


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POPINA – Critical point



Realignment of fairway from km 407.5 to 401



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Supervision and management of works

- Verification and approval of design documentation, including site investigation reports, modelling reports, calculation for sizing the works, technical specifications per type of works and locations, detailed drawings etc.;
- Supervise the procedures for obtaining the permits and authorization of works, up to the Building Permit, in each country;
- Review and approval of the Contactor's documents (insurance policies, guarantees, Works Program, Quality Assurance Plan, Traffic Management Plan, Work Safety and Security Plan etc.) in each country and monitoring the respecting of the approved documents during the execution of works;



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Supervision and management of works

- Verification and approval of design documentation, including site investigation reports, modelling reports, calculation for sizing the works, technical specifications per type of works and locations, detailed drawings etc.;
- Supervise the procedures for obtaining the permits and authorization of works, up to the Building Permit, in each country;
- Review and approval of the Contactor's documents
- Supervision of works on site, in terms of quality and quantity in accordance with the Romanian and Bulgarian legislation;
- Monitor the physical and financial status of the works, per country, type of works and location



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Works supervision contract

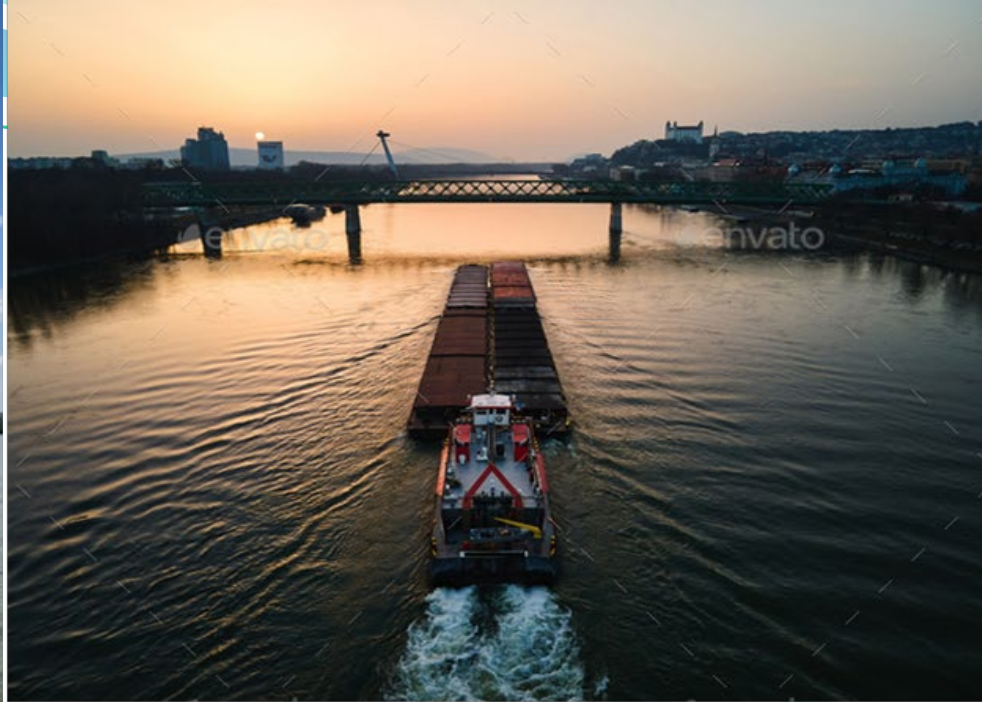
The work supervision contract will be carried out by RA AFDJ, within a Joint tender procedure.

The tender documentation was updated in accordance with environmental decision issued from RO and BG authorities.

The Agreement for Joint procurement procedure should be signed between partners.



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Thank you for your attention!

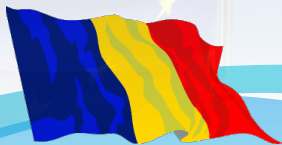
AFDJ Galati Team



IAPPD Ruse Team



EAEMDR Ruse



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