







# **DFRDAP I**

KEY INFORMATION ABOUT THE PROJECT

UPGRADE OF IRON GATE I (ĐERDAP I) NAVIGATION LOCK (Kladovo and its constituent municipalities)

PPF8/EuropeAid/137044/DH/SER/RS

Sector: Transport



The Derdap I navigation lock represents an important element of the Danube river's navigational infrastructure, as part of the international corridor Rhine–Danube. It was constructed in 1972, and since then it never underwent a full overhaul.

Performing the very demanding navigation lock operations and everyday use of the existing equipment and installations over the last 45 years – with the equipment deteriorating on a large scale – contributed to the navigation lock's safety and reliability becoming unsustainable without major investments in maintenance. The cost of frequent and regular maintenance is considerably high, which leads to jeopardising the functioning and efficiency of the structure itself. Maintenance options are often limited, which additionally jeopardises the navigation lock's operational reliability, performance, and safety.

The project is focused on renovating and upgrading the Đerdap I navigation lock, contributing to the modernization of the infrastructure, as well as to enable uninterrupted navigation on the Danube (Corridor VII) in full compliance with the requirements of the EU, the Danube Commission, and the standards of the Republic of Serbia.

Considering the role and importance of this structure in the territory of the Republic of Serbia, a full reconstruction is required for the damaged, while the electro-hydraulic and hydro-mechanical equipment and installations. The reconstruction itself will ensure continuous and reliable operation of the structure and uninterrupted, safe, and efficient navigation on the Danube.

The rehabilitation of the Derdap I navigation lock will improve the stability of the conditions and the sustainability of river transport through Serbia, connecting the upstream and midstream with the downstream Danube countries. The river transport on the Serbian side of the Danube is mostly transit transport from the Black Sea to Hungary, Austria, and Germany - which is why this project will positively impact the transport costs, further contributing to the economic development at the local and regional levels. At the same time, the technology life-cycle and operability of the Derdap I navigation lock will be ensured for the next 25 years, securing a good navigation status







## PROJECT OBJECTIVES

- » Increasing the efficiency, reliability, and competitiveness of the Danube waterway within the Trans-European Transport Network (TEN-T);
- » Reducing the time of vessel retention and eliminating the closing of the gate;
- » Improving the gate's performance and shortening the closing cycle;
- » Improving Danube navigation and ensuring smooth development of water transport;
- » Improving the reliability, predictability, and stability of operations and ensuring continuity of the waterway;
- » Improving navigation safety and the total available Danube navigation parameters;
- » Achieving the objectives of the European Commission's Water Framework Directive;
- » Ensuring compliance with the Strategic Environmental Assessment of the Special Purpose Spatial Plan for the international waterway E 80 - Danube River (pan-European Corridor VII).

### PROJECT DESCRIPTION

Within the EU PPF program, the EU PPF8 project unit's expert team developed the legally prescribed **Environmental Impact Assessment** Study in line with EU directives and domestic Serbian legislation, as well as the tender documentation in line with PRAG or EIB requirements of the European Union and the FIDIC Yellow Book regulations for calls for bids.

The reconstruction and upgrade of the Derdap I navigation lock will include works related to hydro-mechanical equipment, electro-hydraulic installations, and equipment and construction facilities.

## PROJECT STATUS (JANUARY 2019)

#### **Project results**

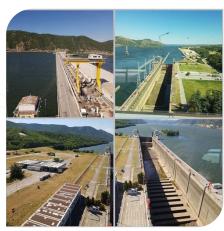
EIA Study	Tender Documentation
APRIL 2018	MAY 2018

The preliminary activities – including support in the preparation of the Terms of Reference and Methodology – are fully completed.

#### The project is part of documented development strategies:

Spatial Plan of the Kladovo municipality; Infrastructural Corridor Plan; General Master Plan for Transport of the Republic of Serbia 2009-2027; Special Purpose Spatial Plan for the international waterway E80 – Danube River (Pan-European Corridor VII); EU Water Framework Directive (2000/60/EC); Directive 2005/44/EC on Harmonised River Information Services (RIS) on the EU's inland waterways.





HPP Đerdap I - hydroelectric power plant and navigation locks (the Serbian is marked with the red quadrant)







