

In Germany, there are plans to improve the fairway depth on the non-tidal Elbe to at least 1.40m below the 2010 Equivalent Water Level on a long-term average of 345 days and for a new lock at Lüneburg-Scharnebeck on the Elbe Side Canal. The strategic task in the Czech Republic is to improve and stabilise the navigation conditions between Ústí nad Labem and the state border in Děčín. Another objective is the extension of navigability to Pardubice. In 2021, the Government of the Federal Republic of Germany and the Government of the Czech Republic signed an agreement on the Maintenance and Development of the cross-border Inland Elbe, entering into force in August 2024 in line with the Overall Strategy for the Elbe (Gesamtkonzept Elbe).

Climate change also requires a changing approach to waterway investment. Next to classical infrastructure interventions, dynamic river management helps to ensure reliable navigation. Waterways require rolling work programmes to effectively address changing patterns, implementing adaptive, integrative and nature-based solutions where possible and falling back on grey infrastructure where needed.

### Inland ports

Ports have the potential to act as engines of growth for the cities and regions in which they are located. As hubs with varying degrees of multimodality, they are key interfaces between different modes of transport. However, with few exceptions, ports along the Danube and Elbe rivers have suffered from years of underinvestment. As a result, not only are many port facilities no longer commercially viable, but multimodal connections have also deteriorated. Although progress has been made in some areas along this corridor in recent years, it is still not enough. Outdated port infrastructure and equipment in several ports is a major constraint.

€5 billion

are required to make the inland waterway network of the Rhine-Danube corridor bottleneck-free and to increase climate resilience

25%

- ➔ The Danube is the main contingency route for massive shipments in case of disruption of the Black Sea route.
- ➔ Carrying almost 25% of total Ukrainian grain export, it is the most important **Solidarity Lane**. Nearly 40 million tonnes of grain and edible oils were exported via the Ukrainian Danube ports and the port of Constanta.
- ➔ The Danube is also indispensable for Ukraine's imports and the export of non-agricultural goods.

40 million tonnes

"Through transnational cooperation along the Danube, we improve fairway conditions to make inland navigation more climate resilient. We use sensors and drones for measuring water levels, navigation channel depths and bridge clearance heights. We create a transnational waterway monitoring system (WAMOS 2.0) and improve information to users. Finally, we are testing temporary infrastructure elements to provide a non-invasive, near natural solution for low water periods to flexibly influence navigation channel depth and maintain the reliability of navigation."

Andreas BAECK, Senior Project Manager FAIRWAY Danube, viadonau



"River cruises are the perfect way to experience Europe's cultural treasures and breathtaking landscapes up close. However, this is only possible with an intact and sustainable infrastructure on Europe's waterways. We can only master this task together with all stakeholders."

Guido LAUKAMP, CEO Nicko Cruises



### KEY MESSAGES

- The Danube is a vital link in the European transport network:
  - a resilient transport partner during the Covid-19 pandemic,
  - the cornerstone of the EU-Ukraine Solidarity Lanes since 2022, with Danube shipping and ports handling the majority of Ukraine's grain exports, ahead of all other modes.
- Without investment in the Elbe region, there will be insufficient capacity to transport large volumes of raw materials by sustainable modes at an acceptable cost, jeopardising industrial growth in the wider region.
- Good infrastructure is required to ensure the reliability of navigation. Both regions host a rich biodiversity. The multiple functions of the waterways are combined in sustainable way projects to anticipate climate change.

### Corridor background

The Danube is the EU's longest river, flowing through 10 countries. The Danube Region stretches from the Black Forest in Germany to the Black Sea and is home to 115 million inhabitants. It is a dynamic region with industrial areas and dense agglomerations along the Danube and its tributaries. Over 25 billion tonne-kilometers are carried over the Danube corridor. The Danube is also of particular importance to river tourism, attracting many visitors to the natural sceneries and landmark cities along the river.

The river Elbe connects the port of Hamburg with Prague and the German canal network. Via the Mittellandkanal it reaches the Ruhr area and finally the Rhine, Main, Mosel and Neckar rivers. The land transport network in this industrial hinterland is at saturation point. At present, 4.2 billion tonne-kilometres of goods are transported on the Elbe alone. Without investing in inland waterway infrastructure, the capacity to transport large volumes of raw materials will be insufficient, also hampering clean industrial growth in the wider region.

### Waterway infrastructure

90% of the Danube navigable waterway network is classified on paper as a class Vb waterway or higher, but meeting the targeted fairway depth remains a challenge at a number of shallow locations during certain periods of the year. Since the endorsement of the Fairway Rehabilitation and Maintenance Master Plan in 2014 and its implementation through the CEF-funded FAIRway Danube projects and other national projects, significant progress has been made to maintain a good navigation status for the Danube. Crucial bottlenecks remain and continued political support for cross-border coordination and reliable financing are foundational to prevent any blockages.

# Critical waterway locations

