



# Rhine/Meuse-Main-Danube inland waterway axis

**Removing bottlenecks on the Rhine–Main–Danube corridor will improve its navigability, favouring the transfer of freight traffic on this increasingly congested route from road to waterways.**

## What is the axis?

The Rhine–Main–Danube axis is a major freight route connecting the North Sea (port of Rotterdam) to the Black Sea (in particular the port of Constanta). Several sections pose navigability problems since the draught is less than 2.8 metres at some times of year. To give access to vessels of up to 3 000 tonnes, a minimum draught of 2.5 metres is required along the entire length of the waterway.

Construction work on various stretches of the Danube – in Germany, Austria, Slovakia, Hungary, Romania and Bulgaria – should ensure the minimum draught at all, or most, times of year. In particular, work should clear the major bottleneck on the Straubing–Vilshofen section in Germany, which has the most restricted draught on the entire route. This project also includes work on one of the main branches of the Rhine, the River Meuse, to ensure a 3.5 metre draught giving access into Belgium for vessels of up to 6 000 tonnes.

## What are its expected benefits?

The project will improve the competitiveness of the waterway in relation to other modes of transport on this multimodal east–west route, in order to encourage the transfer of freight transport away from roads. This modal shift is particularly vital along the Danube corridor, which is increasingly congested due to sharp increases in the volume of traffic, which are expected to continue.

Some five billion tonne-kilometres of freight could be transferred to waterways each year, in the long term, by increasing the link's overall capacity by around 30 %. Improvements in inland waterway navigability will benefit operators by significantly reducing transport costs per tonne of freight, in the order of 20–30 %. It will integrate the networks of several of the new Member States into the TEN-T, and will also be instrumental in improving economic and social cohesion by creating jobs.

## What is its current status?

In most of the countries concerned, the necessary construction projects are included in national transport infrastructure development plans. Cost-effectiveness studies and environmental impact analyses for the various sections are in progress or have been completed, as have studies to analyse the flood risk resulting from the changes to the river. The option being prepared by Germany for the Vilshofen–Straubing section will improve navigability, but will not guarantee a draught of 2.5 metres throughout the whole year. More extensive improvements are still under consideration.

In Austria, the environmental impact assessment for the work should be completed in 2006. Hungary has launched a study (with TEN-T funding), which should be completed in late 2006. And the Hungarian and Slovak authorities aim to establish joint guidelines for work on the common section of the Danube.

Romania has implemented some works to improve navigability and has asked for technical assistance from the EU to prepare a comprehensive study for the project in its territory, with 75 % of the costs financed by the ISPA (pre-accession structural assistance) fund.

Works on the river Meuse in the Netherlands will start in 2005, and on the lock at Lanaken in Belgium, north of Liège, in 2006.

In addition to the infrastructure projects, optimising transport conditions also requires improved management of inland waterway traffic. River information services (RIS) will be deployed to provide common, harmonised information services. These will support traffic and transport management for inland navigation, and create interfaces with other modes of transport. These services will support modal shift to more environment-friendly transport modes on the corridor.

Currently, under TEN-T, Member States are developing a master plan (due by end-2006) for the coordinated technological, financial and physical deployment of the EU directive on RIS on the European inland-waterway system in coming years.

Priority section	Type of work/status	Distance (km)	Timetable	Total cost as of end 2004 (million EUR)	Investment up to 31.12.2004 (million EUR)	TEN-T contribution, including studies, up to 31.12.2004 (million EUR)
Rhine–Meuse	Improve navigability	140	2005–19	428	0	0
Lanaken lock	New lock	n.a.	2006–11	76	1.1	1
Vilshofen–Straubing	Improve navigability	70	2008–13	128	0	0
Vienna–Bratislava	Improve navigability	47	2006–15	180	2	0
Palkovicovo–Mohács	Improve navigability	358	2007–14	300	0.6	1.1
Bottlenecks in Romania and Bulgaria	Improve navigability	927 (26 in Bulgaria)	2002–11	777	140	0
<b>TOTAL</b>		<b>1 542</b>		<b>1 889</b>	<b>143.7</b>	<b>2.1</b>

