

DEVELOPING A SAFE, ACCESSIBLE AND EFFICIENT PORT OF THE FUTURE

WIDENING THE YANGTZE CANAL

The port of Rotterdam is the largest seaport in Europe, and the world's largest seaport outside East Asia. It is located in and near the city of Rotterdam in the Netherlands. Covering 105 square kilometres, the port stretches over a distance of 40 kilometres, with the city centre's historic harbour area to the east and the reclaimed Maasvlakte 1 and Maasvlakte 2 areas that project into the North Sea to the west.

History: expansion of the Maasvlakte area in brief

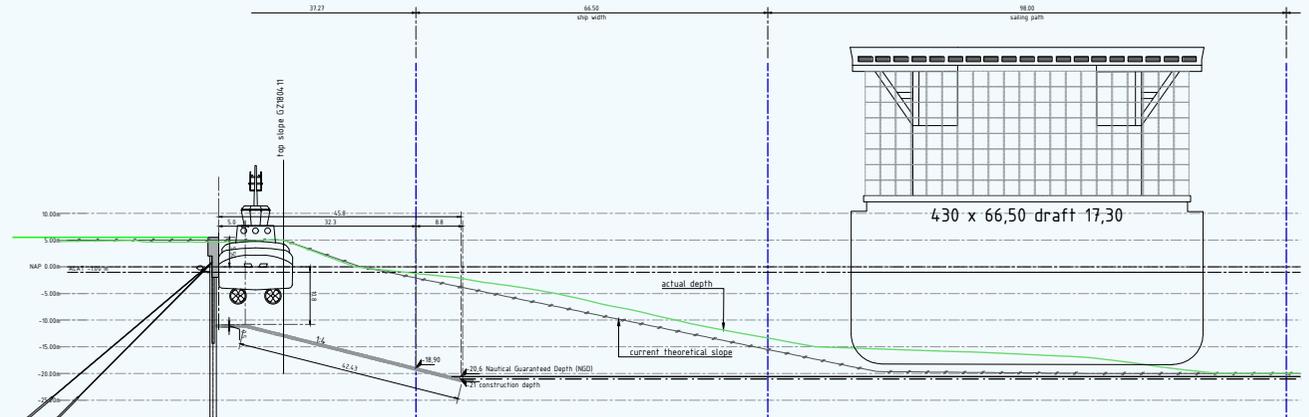
The "Second Maasvlakte" (aka MV2) was built between September 2008 and May 2013 by reclaiming land in the North Sea, extending the port of Rotterdam by about 2,000 hectares and making it possible to accommodate the growth in container and industrial activities. As a result, the former Yangtzehaven dock has been the Yangtze Canal since 2013. At 600 metres wide and 20 metres deep, it is the access channel for the port basins of MV2 (the Prinses Arianehaven, the Prinses Alexiahaven and the Prinses Amaliahaven).

Significant growth

Current expectations are that container volumes to ports in Northwest Europe will grow significantly in the years ahead in all [economic scenarios](#). The capacity of the terminals on the MV2 will rise significantly in the future to accommodate this growth efficiently and to prevent supply-chain disruptions on the three TEN-T hinterland corridors.

The container vessels using the Yangtze Canal are also bigger than in the past. Currently, the width of the Yangtze Canal is therefore inadequate for two-way navigation and it represents an obstacle to future development. The present maximum size for vessels is already causing congestion because inbound and outbound ships have to wait for each other, leading to waiting times of more than one hour for inbound or outbound ships.





The frequency of these delays will increase as terminals expand. The result will be unsafe nautical situations, the underutilisation of the available terminal capacity and increased emissions (of, for example, GHG, NO_x, SO₂, PM₁₀) from waiting vessels. Finally, the expansion of container traffic will lead to more demand for berths for inland shipping and tugs, and for waiting locations. At present, however, there is not enough space available for these purposes.

Widening the Yantze canal's navigation channel

The goal of the project is to make the port safer, more accessible, more efficient and future-proof. In addition, multimodal hinterland capacity will be strengthened because this project also creates the berths for tugs, feeders and inland shipping that will be required to cope with the predicted growth in the future.

In addition, the project will include the installation of

sustainable shore power for tugs and inland shipping. In this way, it will make an even larger contribution to the reduction of emissions and therefore to the implementation of the European Green Deal objectives and the Alternative Fuel Infrastructure Regulation.

The Port of Rotterdam Authority, working with shipping companies and pilots, established this project to achieve the following goals:

1. The implementation of phase A will make two-way traffic possible for vessels up to 18,000 TEU.
2. The implementation of phase B will make two-way traffic possible for vessels up to 24,000 TEU (the existing fleet).

3. The implementation of phase C will make it possible to accommodate two-way traffic for two Future 1 vessels up to 30,000 TEU, with a maximum draught of 17.3 metres for one-way traffic involving larger vessels. The Future 1 vessel is still under development.

This project consists of the following phases:

- Phase A** - construction of 500 metres of quay to serve tugboats (including shore power for the tugs);
- Phase B** - construction of 1450 metres of quay for inland berths (including shore power for inland vessels);
- Phase C** - dredging work to widen and deepen the waterway.

Construction planned:

