

SPOT LANDING SOUGHT FOR NEW RAIL TERMINAL



EUROGATE Container Terminal Bremerhaven determines location for second module of rail terminal with support from AKQUINET

The container terminal Bremerhaven is one of the most modern and efficient hubs for international container transport. The terminal facility is extensively networked with the hinterland via rail and road. Around half of the landside goods at the terminal are handled by rail at the 'Rail Gate Bremerhaven'.

„AKQUINET used the CHESSCON simulation to provide us with essential information for the construction of our second module of the rail terminal. With the results of the analyses, we were able to precisely determine the best possible position for the rail terminal and start planning for the future well prepared.“

MALTE GERBER,

Project Manager, EUROGATE Container Terminal Bremerhaven GmbH

Precise position for a new Rail Terminal module

To cope with the growing throughput at EUROGATE Container Terminal Bremerhaven in the future, those responsible are planning a second module for the rail terminal as a facility for combined transport (CT). The limited space and traffic density on the terminal site required a careful location analysis. EUROGATE turned to AKQUINET for a comprehensive analysis of the impacts of different types of (automated) horizontal transport solutions on the layout of the traffic network around the rail terminal. The pros/cons of various potential equipment types have been analysed. Based on the results the optimal location of the second rail module has been found. This guarantees the future proofness as the decision about the transport equipment has not yet been made.

The simulation had to take into account the new complex of transshipment tracks and railway cranes had to fit logistically into the existing terminal structure - also with regard to future development and modernization.

The planned area between the main lorry entrance (gate) and the existing Rail Terminal module was limited from the outset. Despite access via existing, frequently occupied tracks, the CT facility had to be easily accessible for terminal vehicles (straddle carriers).

Furthermore, the following had to be determined for the CT facility: the possible handling volume without intermediate storage capacities as well as effective options for equipment and horizontal transport.

Precise CT planning with CHESSCON simulation

AKQUINET developed a customized positioning solution and corresponding simulations for the complex requirements of positioning. This was used to verify the position and traffic flow. Parameters ranging from the handling volume and the number of tracks to the closing times of the level crossings formed the basis of an in-depth evaluation. The possible handling with the defined volume was tested - including peak scenarios. The complete simulation of the block train procedure ensured realistic journey times. CAD drawings were used to determine space, distances and exact positioning. Corresponding scenarios for horizontal transport and the space requirements of the device were also taken into account.

AKQUINET compared possible terminal positions with different equipment using numerous parameters. Based on the simulation results, the planning for the construction work started almost 70 meters to the north of the initial rough planning. The rail terminal will comprise six transshipment tracks and four loading cranes. Two level crossings are also expected to be installed.

Conclusion: With the help of AKQUINET's expertise and the CHESSCON simulation, EUROGATE received a comprehensive planning aid for the second module of the Rail Terminal, which will effectively increase the handling capacity between ship and rail.



✓ Customer benefits

- Detailed simulations of several location scenarios
- Exact simulations as a basis for decision-making
- Planning security for new Rail Terminal module

✓ Why AKQUINET?

- In-depth knowledge of container terminal automation and operation processes
- Numerous simulations carried out at terminals worldwide
- CHESSCON as a state-of-the-art solution

