INTERMODAL RAIL FREIGHT TWIN HUB NETWORK NORTHWEST EUROPE

**Funding:** European  
**Duration:** Jan 2010 - Sep 2015  
**Status:** Complete with results

**Objectives:**

The AIM of the project is to make intermodal rail transport in, from and to North West Europe (NWE) more competitive, in particular between the Dutch and the Belgian seaports and European inland terminals, in this way creating the conditions to shift flows from the road to the rail sector, providing in more sustainable and robust transport and a higher network connectivity and territorial cohesion within NWE. The central configuration to achieve this aim is the Twin hub network, a transnational rail service network. Its implementation to improve intermodal performances is the MAIN OBJECTIVE of the project.

The objective refers to:

1. promising networks. which could be implemented on the short to long term.
2. A pilot (demonstration) network with three Twin hub trains to be implemented within the project period.

The Twin hub network connects seaports with inland terminals (e.g. France, Germany, UK; ? App. 2). The general idea is to move Rotterdam flows in Antwerp trains to areas in which these trains have or could have a strong market position. Antwerp flows go along with Rotterdam trains to regions where Rotterdam is or could be well represented. The smaller seaports improve their rail performance by getting more attached to the train services of both large ports. Inland terminals send their load units to Dutch and Belgian ports in joint instead of separate trains.

The central logic of a hub-and-spoke network is to let smaller flows benefit from scale and scope advantages (large trainloads and high transport frequencies, more connections and a higher infrastructure utilisation; flows which for such reasons cannot be moved by direct trains (App. 3). Most intermodal rail flows are too small for direct trains, also – and maybe surprisingly – those from and to large ports as Antwerp and Rotterdam. The Twin hub cooperation generates more advantages than separated hub-and-spoke configurations, as the service region of the hubs is extended to a larger area.

**Parent Programmes:**  
INTERREG IVB - INTERREG IV - Transnational programmes

**Funding type:** Public (EU)  
**Other programmes:** 2007 - 2013 North West Europe

**Partners:**  
Vrije Universiteit Brussel/Erasmus Universiteit/Karlsruher Institut für Technologie (KIT)/NEA Transport and training/Nieuwenhuis Rail Expertise/Ab Ovo Nederland BV/John G. Russel (Transport) Limited/TX Logistik AG/ACTS Nederland BV (HUSA)/IMS Rail Switzerland/Havenbedrijf Rotterdam N.V./Zeeland Seaports

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**Key Results:**
Final Report Identification of promising Twin hub networks The objective of the first work package is to identify potential promising partial Twin hub networks in North West Europe which already exist to establish the foundation for the project, as well as to show the magnitude of the modal shift and the improved rail network connectivity. A network is promising if its door-to-door transport costs are competitive with the reference mode (in most cases = road transport), while the transport quality, in particular transport frequency, meets the needs of shippers. The final report of Work Package 1 can be found under: http://www.twinhubnetwork.eu/documents/WP1_report_Identification_promising_networks_final_report.pdf

Final report General Functional Description Twin Hub Order Booking system Within WP 2 an interactive booking information system has been developed. It is a joint system for the operators in the project. Interactive means that information can be shared at a deeper level than a system, which is only interconnected at the surface. This development will improve the load planning, matching the train capacity of one operator with the flows of another and vice versa. The final report is available under: http://www.twinhubnetwork.eu/documents/Twin_Hub_order_booking_system_final_report.pdf

For other Reports and publications see: http://www.twinhubnetwork.eu/reportsandpublications.php

STRIA Roadmaps: Network and traffic management systems
Transport mode: Multimodal transport
Transport sectors: Passenger transport, Freight transport
Transport policies: Societal/Economic issues, Environmental/Emissions
Geo-spatial type: Network corridors