PROJECT

RETRACK

Reorganisation of Transport Networks by Advanced Rail Freight Concepts

Funding: European (6th RTD Framework Programme)
Duration: May 2007 - Apr 2011
Status: Complete with results
Total project cost: €23,807,939
EU contribution: €10,972,585

Call for proposal: FP6-2005-TREN-4
CORDIS RCN: 85683

Background & policy context:

The RETRACK project will support the Commission's aspirations to induce a sustainable modal shift of freight traffic from road to rail to achieve a market share of 15% by 2020. This aspiration is also supported by the European Rail Research Advisory Council's (ERRAC) declared aim of bolstering rail's market share of freight to a similar level.

Objectives:

The RETRACK project applies an innovative rail freight service concept to the movement of rail freight across Europe. This is achieved through the design, development and implementation of a commercial trans-European rail freight service along the rail corridor between Rotterdam (Netherlands) and Constanza (Romania) on the Black Sea.

The project aims to secure a significant modal shift of cargo from road to rail and to create an effective and scalable rail freight corridor between high demand regions in Western Europe and new high growth regions in Central and Eastern Europe. The project will look to develop links with other emergent corridors from the TEN-T network as well as those assessed in the REORIENT and TREND projects.

Overall, the RETRACK project addresses the issues arising from transforming vision into practice and will establish a clear demonstration to the rail freight and wider logistics industry that pan-European continental rail freight can be competitive, reliable and value for money.

Methodology:

Achieving RETRACK project's main objective will encompass the following processes:

- determining of types of barriers that obstruct the supply of competitive rail intermodal service in corridors of operations;
- removing/circumventing existing constraints through technological innovation, efficient operations and inputs from scientific research;
- supplying the energy-efficient competitive rail service that enhances competitiveness of transferred goods;
- determining how the barriers hindering deployment of new operations systems for train path allocation could be tackled;
- applying innovative rail vehicles and cargo transfer technologies for transfer of containers, swap bodies and trailers along the RETRACK corridors;
- facilitating safe transfer of cargo documentation to all supply chain parties by employing functionalities of an ICT platform;
- supply of high-quality rail service by deploying innovative and cost-effective rolling stock;
- removing/circumventing existing constraints as well as facilitating opportunities related to the applied train control- and command systems throughout the corridor, including those parts covered...
by the new ERTMS-system;
• applying innovative operations planning, scheduling, and routing management techniques for supply of high-quality rail service;
• streamlining the rail goods flows by dealing with market-related and legislative constrains such as working time limitations, shortages of qualified personnel, and traffic hindrances;
• devising strategies for shifting considerable goods volumes from road to the RETRACK rail corridors;
• compressing the noise/emissions/vibrations and accident occurrence during the project's duration by transferring sizable goods volumes from road to RETRACK-served intermodal rail corridors;
• devising business models for until 2015 market entrenchment of the RETRACK operators, and attaining a competitive level of financial profitability and returns on investments;
• establishing a joint venture between rail operators serving the RETRACK international corridors and strategic alliances with shippers, other transport suppliers (for instance, shipping lines) and logistical intermediaries for long-term access to large goods repositories.

**Parent Programmes:**

[FP6-SUSTDEV-2 - Sustainable Surface Transport](#)

**Institute type:** Public institution  
**Institute name:** European Commission  
**Funding type:** Public (EU)

**Lead Organisation:**

| The Netherlands Organisation For Applied Scientific Research TNO  
| Address: Schoemakerstraat 97 2628 VK DELFT Netherlands  
| **EU Contribution:** €0 |

**Partner Organisations:**

| The University Of Newcastle Upon Tyne  
| Address: Kensington Terrace 6 NEWCASTLE UPON TYNE NE1 7RU United Kingdom  
| Organisation Website: [http://www.ncl.ac.uk/](http://www.ncl.ac.uk/)  
| **EU Contribution:** €0 |

| Babcock & Brown Limited  
| Address: 7TH floor, 1 Fleet Place LONDON United Kingdom  
| **EU Contribution:** €0 |

| Coöperatie European Bulls, Rail Freight Alliance U.a.  
| Address: Moezelweg 136a ROTTERDAM-EUROPPOORT Netherlands  
<p>| <strong>EU Contribution:</strong> €0 |</p>
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<td>Transportoekonomisk Institutt Stiftelsen Norsk Senter For Samferdselsforskning</td>
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Key Results:

An important part of RETRACK is a ‘demonstration train’ that enables identifying and testing the possibilities and limits for new and innovative transport concepts on selected corridors in practice. A year after the start of the first train with two customers and a weekly departure, the RETRACK train runs three times per calendar week between the hubs Köln-Eifeltor and Györ with train lengths of up to 740m and carrying 2 300 tonnes in each direction. The train is regularly used by more than 10 customers from various economic sectors. A secondary hub is also being established in the Rotterdam region to meet the increasing demand to and from Rotterdam.

The RETRACK demonstration train is conceived as a ‘group of wagons train’. This means that transport volumes of various customers are combined on the main run Cologne-Györ into a train set, the individual customer volumes usually being smaller than the amount suitable for a block train. Goods of all kinds – from agricultural products and powdery bulk cargo to semi-finished products from the coal and steel industry, chemical products including dangerous goods as well as machine parts and containers – are carried.

The train is operated by the RETRACK consortium members Central European Railways Rt. (Hungary), LTE Logistik (Austria) and Transpetrol GmbH (Germany), with Transpetrol assuming the role of a neutral train operator and railway undertaking for the German part of the service. The destinations regularly served today include Rotterdam, Amsterdam and Oss in the Netherlands, the German cities of Marl, Duisburg and Cologne, Gent in Belgium, Linz and Villach in Austria and in Hungary Györ, Bekesczaba, Oroshaza and Sopron, among others.

Technical Implications

Two new activities have been added to the scope of work of RETRACK. The large amount of data and information gathered in RETRACK will be presented in a structured and corridor-based Knowledge Base. This Knowledge Base will be linked to other EU-wide transport information systems and will be designed to facilitate the transfer of information on rail freight corridors throughout Europe.

RETRACK gives a broader continental perspective by aiming at the possible connection of the existing West-East European corridor onward to Russia and China through three alternative Eurasian rail routes:

- via the Trans Siberian corridor,
- via Kazakhstan, and
- via the TRACECA corridor.

Feasibility studies will be conducted along these three routes, this include assessing rail freight policy priorities and market developments in Russia and China, probing the potentials of linking the three Eurasia land-bridges to the RETRACK corridor, and investigating the feasibility of setting up rail freight services towards Russia and China, as well as the preparation of demonstrations.

Documents:
- Press release RETRACK May 2011 (Project presentation)

STRIA Roadmaps: Network and traffic management systems
Transport mode: Rail transport
Transport sectors: Freight transport
Transport policies: Societal/Economic issues
Geo-spatial type: Network corridors