# retrack
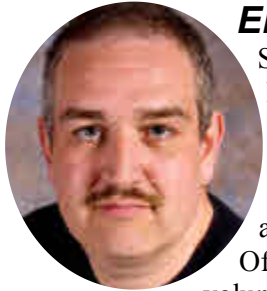## Improving European Railways
### An Integrated EU-Project

No. 6 - June 2010

## EDITORIAL



Since late 2008, rail freight has been hit hard by the economic recession. As consumers demanded fewer products, factories cut production, reducing the need for transport. In Germany alone, according to the German Federal Statistics Office there was a 20% drop in rail freight volumes. The medium-term outlook is unclear.

Many private rail operators have faced mergers and acquisitions in the past year: TX Logistik is now majority-owned by Trenitalia, and rail4chem was acquired by Veolia Cargo, which in turn has recently been taken over by Fret SNCF. SNCF also acquired Geodis amongst others. Rail Cargo Austria lies third in terms of tonne-km after DB Schenker Rail and Fret SNCF, thanks to its acquisition of MÃV Cargo in December 2008.

It has also been a difficult year for the partners in RETRACK, losing partners and traffic volumes fell. However, our core partners came through 2009 healthy and vibrant and in some cases with an improved financial result. The market is hard but it offers opportunities and challenges which we can meet, and it is with great pleasure that RETRACK announced its weekly train service between Cologne, Germany and Gyor, Hungary. For more details see the article opposite.

Against the background of lower volumes and increased competition it is an uncertain future but one in which we believe we can demonstrate the viability and vibrancy of cross border rail-freight corridor traffic, levering the new liberalised EU rail system to achieve and deliver value for money and improved service to promote our mutual interests and EU competitiveness.

*Tom Zunder, WP8 Leader*
*Senior Research Associate, NewRail, Newcastle University*

## THE RETRACK DEMONSTRATOR TRAIN SERVICE
*Johannes Marg, Transpetrol*



It is with great pleasure that RETRACK announces its weekly train service between Cologne, Germany and Gyor, Hungary. The RETRACK Demonstrator offers very fast and reliable services.

On 27th February 2010 RETRACK launched a weekly rail freight service between Cologne (D) and Györ (HU), carrying automotive products, agribulk and chemicals. Transpetrol, a leading provider of rail logistics services and member of the VTG Group, is the operator of the weekly RETRACK train. Two other RETRACK partners, LTE Logistik und Transport and Central European Railway provide the traction services. An interoperable multipurpose locomotive avoids unnecessary loco changes at the border stations, thus ensuring a seamless and fast service.

The train departs on Wednesday afternoons from Cologne and arrives 21 hours later in Györ. On Fridays it returns to Cologne. The business model successfully integrates the specific logistic requirements for transport of cars, grain and chemicals into a service concept. The business model

## WHAT IS RETRACK?

The RETRACK project is applying an innovative rail freight service concept to the movement of rail freight across Europe. RETRACK is the "Reorganisation of Transport networks by advanced Rail freight Concepts". It is funded under the European Commission (EC) FP6 Programme. The project started in May 2007 and will run for four years.

has been developed and will be demonstrated by RETRACK.

Customers with full sized trains will profit from the block-train quality and block train price-level of the RETRACK demonstrator and customers with wagon groups and/or single wagons can use the RETRACK services as well, to improve both transport quality and rolling stock utilisation, consequently lowering their costs for international rail transport.

## Commercially available service

There are no restrictions on the RETRACK demonstrator train in terms of mode, size of transport, or the type of goods carried:

- RETRACK is open for both conventional (wagon load) and intermodal (Container/Swab bodies) wagons
- RETRACK offers "door-to-door" solutions for individual rail cars of all kinds and groups of wagons as well as block-train sized transports, from regular flows to spot volumes
- RETRACK accommodates nearly all kinds of rail cargo, from general dry and liquid bulk, general cargo to dangerous goods (with the exception of nuclear materials and ammunitions/explosives)

The fast transit time between Cologne and Györ of 20 hours cuts days off the normal "below train load transports" and provides conventional goods with transit times normally only found in intermodal transport or "high end" logistic solutions.

RETRACK's main hubs in Cologne and Györ are supplemented by en route pick-up points (i.e. Worms, Nuremberg and Linz) as well as by branches connecting Dutch, Belgian, German, Hungarian and Romanian clients/rail sites to the RETRACK main axis.

If you have cargo that you wish to have carried along the RETRACK corridor from Cologne-Gyor or vice versa then please contact our commercial team:
Email: johannes.marg@transpetrol.de
Tel:+49(0)402 360 0487
Fax:+49(0)40/236004-30
Mobile:+49(0)172 432 8638

## EVALUATION OF THE RETRACK DEMONSTRATOR
### Olav Eidhammer and Jardar Andersen, TOI

The main objective of the evaluation of the RETRACK pilot is to develop an extrapolation framework for approximating how outcomes from the demonstration apply to other Trans-European corridors and fulfil the EC's

common Railway and Economic Policy. The evaluation assignment is structured in five activities:

- Assessment of direct business implications
- Assessment of how the outcomes from rail service demonstrations in the RETRACK corridor can contribute to identify business opportunities in other trans-European corridors
- Assessment of how RETRACK contributes to fulfil the EC's policy by increased interoperability and competitiveness
- Extrapolating input to Europe-wide network issues, such as inflows of Asian imports, the 2004 EU expansion and pending EU accession by new Candidate Countries
- Comparison of RETRACK and CREAM evaluation frameworks and outcomes

The evaluation will use knowledge of corridor-specific operations, and managerial conditions assessed through runs of the pilot and service provisions in the RETRACK corridor.

Performance data from each railway undertaking (RU) will be assessed and evaluated, and the total performance of the train service will be assessed at the train operating company (TOC) level. Furthermore, the perspectives of the customers are to be addressed, and finally policy-related issues will be included in the evaluation activities. The assessment levels are illustrated in Figure 1.
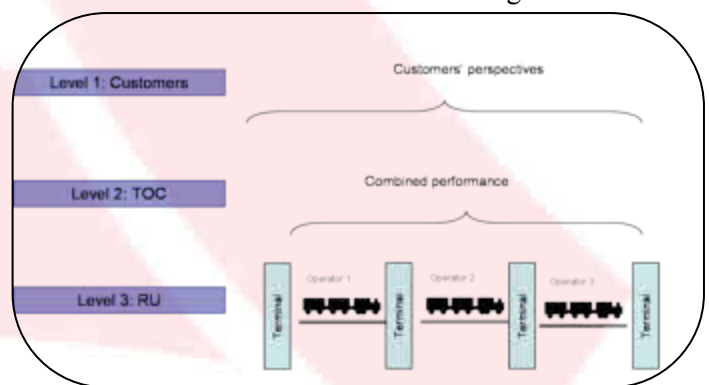


Figure 1: Assessment levels in the RETRACK evaluation and extrapolation activities.

Key Performance Indicators (KPIs) and data requirements to be used in the evaluation are compiled and structured. Parts of the data needed for the KPIs and evaluation on TOC and RU level are already available from the pilot diary, but operational and price data has to be collected from the pilot on a monthly basis. To get customers' perspectives on the services offered in the RETRACK corridor there is a need for primary data by interviews of existing and potential customers.

An illustration of how the indicator transportation time/speed may be relevant for evaluation in different ways at different assessment levels is given in Figure 2.

| EU / society at large | Comparison versus other operators/corridors |
| Customers (Door–To–Door) | Comparison versus alternatives for actual customers |
| Train Operating Company (TOC) | Comparison rail vs truck terminal – terminal, benchmarking of train concept performance |
| Railway Undertaking (RU) (each line segment) | Benchmarking of each operator (avg speed) |

Figure 2: Use of the time/speed indicator on the different assessment levels.

## TRAINING REQUIREMENTS FOR THE RETRACK RAIL FREIGHT SERVICE
### Cees van der Moolen, DeltaRail

Running a RETRACK train is dependent on IT based processing of commercial, logistics and technical operations between the customers and the supplier network. It is clear that training is a necessary step in each IT project.

SOPTIM has developed an IT system named the Railway Management Suite (RMS). DeltaRail will now focus on the development of training activities to implement RMS.

### RMS Training

By simulating the train movement of the RETRACK service and by simulating disturbed situations, all RETRACK staff involved in the logistics chain will be trained to use RMS in a range of situations to understand how the quality of the service can be maintained at the highest level.

By simulating the actual operations plan the staff will also test the operations plan and will be able to make adjustments to the plan prior to the actual operation.

The training will subsequently help to validate procedures and will also help to find the bottlenecks of the RETRACK service as well as help to improve the functionality of the RMS.

### ERTMS/ETCS driver training

The RETRACK corridor already has ERTMS/ETCS equipped lines available for commercial service. To enable qualification for train drivers to operate trains on the ERTMS/ETCS equipped lines and rolling stock ERTMS/ETCS training will be provided.

### Code of language training

Language is a major barrier for cross border operations. By developing a prototype "code of language", by which drivers and signallers can exchange information on safety critical events or procedures, such a code may help to overcome current limiting rules on language in cross border operations.

This training supports both the implementation of ERTMS/ETCS in Europe and the development of a European train driver licence.
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## ADAPTING THE RETRACK IT SYSTEM TO THE LATEST CHALLENGES
### Markus Brozio, Soptim

As part of RETRACK, SOPTIM has developed an innovative IT-System for managing not only the RETRACK train but complex block trains in general. The SOPTIM system consists of three main modules: The Train Control Centre, known as SOPTIM RMS (Railway Management Suite), is used by the railway undertakings at their premises. The Customer Information Centre (CIC) is a web-application which delivers status information of the train runs to other partners outside the railway undertakings. Finally the Railway Integration Platform and Services (RIPS) module is responsible for communication between the different IT-systems used by railway undertakings involved in the train runs.

At the beginning of RETRACK several private railway undertakings, one from every affected country, joined the consortium. But today, three years later, the situation is different. The RETRACK train is run by consortium members and third parties as well. In addition there are new tasks which require extended CIC-functionalities. For example there are the subcontracted railway undertakings which are submitting planned and actual scheduling information to the RETRACK partners. A flexible reporting system is especially required for the RETRACK research partners.

In order to deliver these functionalities an update of the existing RETRACK IT-system has to be designed. First of all a central web service platform including a database with a 24/7 availability is required. In addition a communication interface to the in-house SOPTIM RMS installations is required. And finally for the support of new RETRACK trains and additional external partners a flexible computing platform would be desirable.

Some of these requirements are addressed by the latest Cloud Computing technology. The internet based "cloud technology" offers storage, computing power and communication services in combination with application and security services - available everywhere and at anytime. All those services - available on demand and in a quite flexible way - would meet some of the requirements of changing conditions in the RETRACK pilot.

# RETRACK Newsletter 6 June 2010

The figure shows one scenario of the interaction of the SOPTIM RMS and RIPS systems with additional web-based data acquisition functions by means of cloud technology. As a certified partner of Microsoft, SOPTIM is actually discussing the use of the Microsoft Azure Platform as a basis for delivering the IT-services to the other RETRACK partners and customers. This scenario would simplify the communication and data exchange procedures between the different partners. The web-based provision of logistics information and the acquisition of operational data would be particularly supported using a generic platform. Results are expected during the second half of 2010.
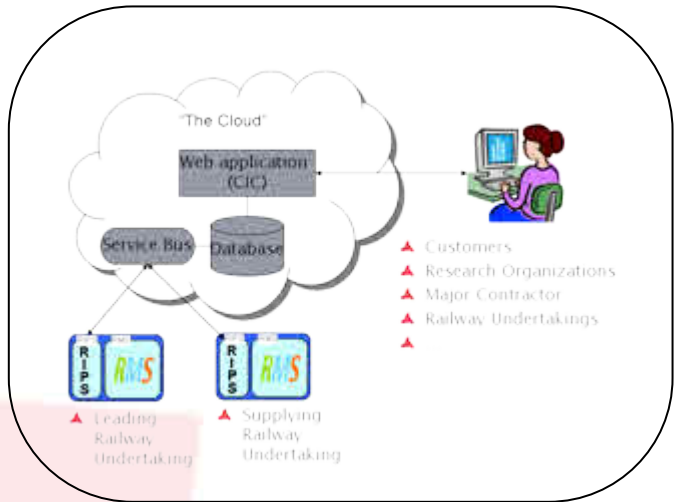email: markus.brozio@soptim.de



Figure 1:The RETRACK IT Systems in "The Cloud"

# RETRACK SPONSORS CONFERENCE



Retrack are sponsoring the Effectiveness of EU Rail Policy Conference which takes place in Brussels on 22 June 2010.

There have been numerous developments recently in the rail freight market related to EU rail policy.

Right now is the time to join the discussion on the future of European rail freight with policy makers and other rail freight operators.

- Address the challenges you are faced with in international and intermodal competition.
- Highlight the areas where improvements are necessary for fair competition between operators.
- And join the discussion in Brussels on June 22nd on how fair competition in rail freight can and should be guaranteed. The conference will also address regulation and plans for future legislation.

The conference Effectiveness of EU Rail Policy offers you a live platform to discuss the challenges, opportunities and the future of rail freight in Europe and directly address your challenges with policy makers, infrastructure managers, operators, regulators and the industry.
Have a look at the conference programme and register today! Full details at: http://www.railpolicy.eu/

# RETRACK CONTACT DETAILS

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