



The efficiency of railway freight transport is an ambitious and complex project of the European Union. In spite of its well-known advantages, especially in the segment of heavy and massive goods, railway transport is hindered by reasons related to both technical and legislative details. There are those hindrances that need overcoming in creating an interoperable network across the entire Europe, as well as on corridors providing connection to Asia. Along this article, we will try to focus on those interoperability constituents related to the soft infrastructure, regulations and facilities which ease railway freight transport to the same extent as technical details.

Starting with the liberalisation of transport within the European Union, the railway freight transport was not as well integrated as railway passenger transport, or air, road or inland waterways transport. Consequently, the Union's policy and that of directives try to promote and develop a more intense use of railway freight transport and intermodal services by struggling to reduce environmental concerns and traffic congestion issues caused by the unequal use of automotive transport across the Union. Many governments, European and not only, are currently trying to encourage the transport of the wider range of goods possible on railways given the reduced negative impact that this type of transport has on the environment.

The European Union's target as related to freight transport policy is harmonising current standards and levelling the legislations of member states so that the intensification of railway freight transport and larger transport volumes could be transposed into reality. The intermodal transport strategy should provide the legal framework through which transport users could decide on the best choice of different means of transport. To this end, Marco Polo European programme is extremely important given its role of shifting the largest volumes possible from road to rail. In consequence, the door-to-door approach of intermodal transport will generate a strong flow in the demands of transport users. Experts in the field believe that the allocation of an adequate support to railway transport as first component of the intermodal system is imposed internationally, through the strongly involved organisations, but also nationally, through the decision-making authorities.

Therefore, intermodality is complementary to other transport policies within the European Union, such as the liberalisation of transport markets, the development of the TEN-T networks and the promotion of fair and efficient charging systems.

On a series of densely circulated European corridors, a well-defined interconnectivity of the different means of transport is not yet completed; in theory, things work just fine, yet in practice, the principle of network interconnectivity would need a better integration in what concerns national legislations. At cross-border level, the missing section pertaining to one type of transport or missing connections between the different transport modes, no matter how small, can prevent the development of a "borderless" intermodal transport chain. Apparently, the main disadvantage of railway freight transport is the lack of flexibility. Although the most efficient and cost-saving transport mode, it still has several obstacles to overcome, either bureaucratic or simply physical generated by the lack of a more efficient harmonisation of the entire railway freight

transport system at European level which weights the development of interoperability to a great extent.

Over the past years, discussions and debates on interoperability were mainly focused on the importance of the technical harmonisation of afferent infrastructures, at international level, of course, the harmonisation of the technical specifications for interoperability on rolling stock and last but not least, the implementation of a single signalling system. However, at the same time, legal harmonisations, regulations and documents accompanying goods are just as important because they permit traffic decongestion and simplified border crossing, thus reducing time and bureaucracy.

To this end, in the past years, the organisations involved, such as OTIF, UIC, CER, EIM and ERA joined efforts in implementing standards and regulations that would help interoperability and generate the establishment of specialised corridors for railway freight transport.

The representatives of the European railway sector believe it is necessary to adopt measures for increasing the credibility of this transport mode in direct connections with beneficiaries by ensuring the punctuality and regularity of this transport mode, especially for freight transport. Step by step, a railway line network will be exclusively dedicated to freight transport, so that this transport mode would be preferred by traders. >

ЖД без бумаг

Согласовывание программных инфраструктур для повышения транспортных объёмов

Повышение эффективности жд товарных перевозок – амбициозный и комплексный проект Европейского Союза. Вопреки его признанных преимуществ, в особенности в плане тяжёлых и объёмных товаров, жд транспорт сталкивается с техническими и законодательными препятствиями. Это такого рода препятствия, которые должны быть преодолены созданием интероперабельной сети на уровне Европы, но и на уровне коридоров связывающие её с Азией. Мы попытаемся затронуть, в данной статье, тему составляющих процесса интероперабельности, которые относятся к программной инфраструктуре, регулирований и благоприятных условий, облегчающие товарные жд перевозки в такой же мере как и технические подробности. >

The harmonisation of soft infrastructures for increasing transport volumes

Paperless Railways

[by Elena Ilie]

> Thus, at first reading the report "A European railway network for competitive freight transport" received favourable opinion from the European Parliament last April. The purpose of this legislation is reducing traffic congestion and improving freight transport efficiency across Europe by establishing international railway corridors exclusively for freight transport.

Currently, railway transport is the least integrated transport mode in Europe which causes delays in traffic, higher costs and the insufficient use of freight transport capacity on railways.

Russia and Montenegro, new COTIF members

Internationally, the first implementation of single and uniform regulations in railway freight transport occurred in 1980 in Bern (Switzerland) through the Convention concerning international carriage by rail (COTIF), completed and amended later in 1999 through the Vilnius Protocol, currently in force. Russia (in February 2010) and Montenegro (in April 2010) accessed COTIF, the number of member states thus reaching 45. COTIF establishment aimed at achieving a package of unitary legislative measures for all signing members intending to develop and to regulate the international passengers and freight rail transport. On this occasion, the decision to set up the Intergovernmental Organisation for International Carriage by Rail (OTIF) was taken, operating as an association assuming these responsibilities as main goal.

The Convention in 1980 stipulated that the rail transport is the subject of one appendix to the Convention, called "Uniform Rules concerning the Contract for International Carriage of Goods by Rail" (CIM). This rule, together with its annexes, represents an integrating part of the convention and was meant to harmonise the national legislation so a more fluid international railway transport could be unfolded. There were also stipulated, besides them, measures concerning railway transport of goods classified as dangerous (RID), of the private ownership wagons (RIP), and of the postal parcels (RIEx) and the transport in containers (RICO).

The creation of an Organisation at state level is intended through the adoption of the Protocol in order to analyse the major issues referring to the railway traffic concerning the states. Therefore, OTIF, following the example of other associations (aquatic, maritime), tries to become the only intergovernmental organisation where the member states could solve the difficulties with regard to the international railway traffic that are the responsibility of the states. They also include aspects related to the safety traffic, use of the infrastructure, elimination of the obstacles in border crossing, harmonisation and standardisation of the infrastructure and of the rolling stock.

Growing intermodal rail freight traffic in CEE

As part of its rail freight project "Developing Infrastructure use and Operating Models for Intermodal Shift" (DIOMIS), the International Union of Railways has recently held a conference in Vienna in late-March. Under the motto "Growing Intermodal traffic in the Central and East European Countries", key stakeholders met to discuss the growth potential of combined transport and to share their experiences on the challenges and opportunities for combined transport in that particular geographical area.

The conference was opened by Friedrich Macher, CEO of Rail Cargo Austria (RCA), who stressed the strategic importance of the region. He explained RCA's aim to run a successful multimodal network along key corridors together with long lasting partners in the industry.

One of the key findings of the UIC study, launched through DIOMIS, is the positioning of hinterland traffic as the growth segment for the near future. The study foresees a traffic shift from the North-South axis to the East-West and anticipates an average growth rate of 8% providing some important conditions are met.

In that respect, representatives of the industry gave their views on the conditions needed to ensure further modal shift to rail through



photo: SBB

concrete business cases. Infrastructure investments and improvements to accommodate longer and heavier trains, coordination of terminal development, equipment availability (wagons and units), cross border interoperability, non-discriminatory access to terminals, service reliability and infrastructure charging were mentioned as priorities to ensure the forecast growth takes place.

One of the most efficient methods of simplifying and harmonising cross-border traffic is the Technical Specifications for Interoperability for Telematics Applications in freight transport (TAF TSI) developed to facilitate the international information exchange on cross-border railway freight transport services. These specifications establish the technical and functional standards necessary to the information exchange between infrastructure managers, railway operators and other interested parties. The simplification of the information exchange increases the efficiency and quality of services, cuts freight volume manipulation costs and provides quality information for customers.

e-Rail Freight simplifies transport documents

In March 2008, nearly 20 railway freight operators decided that by July 2009, they would implement the technical specifications in order to be able to automatically send transport documents. A team including UIC, CER and CIT representatives monitored the programme while RAILDATA aimed at establishing the technical specifications, including the structure of the messages to be sent and their flow. One of the options consisted in the construction of a central version system to enable a tighter cooperation between RAILDATA and ORFEUS members (international central system for information exchange designed to ensure data exchange between CIM consignment notes and partner operators).



photo: SBB

eBusiness, for improving performances

One of the methods of increasing the attractiveness of railway freight transport is reducing the volume of required documents. The manual information system is flawed, slows down the process of booking transport tickets and increases costs. The entire railway system needs electronic support in all these operations. Here are several examples of good practices in implementing electronic applications for simplifying railway freight transport procedures.

The discussions during UIC's eBusiness Conference in 2008 focused on strategies and applications that will make Paperless Processes possible.

The case studies introduced during the conference have showed the way in which operators managed to increase the customers' satisfaction level, as well as the service credibility and punctuality through procedures based on electronic communication systems. Every year, UIC's eBusiness Conference stresses the importance of eBusiness practical innovations and solutions that the railway system could implement in order to obtain more performing results.

Moreover, for the simplification of railway freight transport procedures, Russian Railways has made the decision to launch the automated technological documentation processing system (AS ETD), which will use electronic digital signatures (EDS) on the whole Russian network.

The implementation of the new system will reduce costs for filling the approved forms which are necessary in each technological process. The pilot project on SouthEast, Kuibyshev and Gorki railways tested 28 primary registration documents for traffic departments, wagons, locomotives, travelling facilities and others.

Currently, there are about 700 existing forms to be automated and, by the end of this year, 168 more forms will be developed for signing by EDS. In 2009 was estimated that 150,000 users will participate in this system. Each of them will have an electronic key with its own electronic digital signature. The information on the completed technological operation will become accessible to other participants in the document circulation process 3 minutes after signing by EDS.

"For several years we have been observing the qualitative changes in the organisation of our company's work provided by the developments in IT systems. Information systems are becoming an integral part of the technological and administrative processes of the company", said RZD President, Vladimir Yakunin.



photo: SBB

Therefore, in March 2009, a full version of the technical specifications has been delivered. RAILDATA also succeeded in elaborating an electronic consignment note. The whole project was initiated by and belongs to UIC. The procedure significantly simplifies international and cross-border freight transit.

Sector organisations and profile associations, as well as railway state or private operators cooperate in simplifying these procedures especially for international traffic. Thus, one of the objectives of the International Railway Transport Committee (CIT) is the interoperability of the expedition system where the freight transport companies are operating. CIT task is to unify CIM system, including mainly operators from the West European and Arab countries, with those in SMGS which are specific to the countries of the former USSR, many countries such as, Poland, Ukraine, Bulgaria, Iran etc. accessing to both systems. CIM and SMGS integration process to one single system has registered significant progresses, declared CIT General Secretary, Thomas Leimgruber, the common CIM-SMGS expedition licenses being used more and more by the operators, a recent such example being the transport of Volkswagen company from the Czech Republic and Slovakia up to Russia, using this transit documentation, as well as CFR Marfă, which uses this type of documentation on Ciomești - Moscow and Kiev - Ciomești routes. CIT draw the attention of all the countries on the more and more imperative necessity of unique regulations to form the fundament of traffic control in Europe and Asia. Being both a transport document and a customs paper, the use of the CIM/SMGS consignment note will speed up customs procedures.

Legislative simplification

In April 2010, the Commission sent a proposal to the European Council on the position to be taken by the European Union within the Administrative Committee established by the International Convention on the harmonisation of frontier controls of goods on the proposal to amend that Convention with a new Annex on the facilitation of borders crossing procedures for international rail freight. This decision stipulates that the European Union should accept the new annex 9 to the International Convention on the harmonisation of frontier controls of goods.

The purpose of the annex is to facilitate international trade by reducing, harmonising and co-ordinating procedures and paperwork in connection with the border control of goods in international rail transport. The annex essentially contains obligations that aim at reducing delays at rail border crossing points. This concerns the introduction of minimum requirements for border (interchange) stations, cooperation between countries at these stations, movement of controls from borders to stations of departure or destination, reduction of control time, reduction of paper documents and use of CIM/SMGS consignment note as customs document.

The official and final adoption of the new annex is scheduled in May 2010 on the occasion of the Administrative Committee established by the International Convention for harmonisation. All member states gave their favourable opinion on the amendment proposal. ■

С момента либерализации транспорта в Европейском Союзе, жд товаро-транспортная система не была интегрирована так же хорошо как пассажирский жд, воздушный, автодорожный транспорт или транспорт по внутренним водам. Впоследствии, политика Союза и Директив пытается продвинуть и развить большее употребление жд товаро-транспорта и интермодальных услуг, пытаясь, таким образом, уменьшить проблемы среды и перегруженности движения, вызванные непропорциональным употреблением авто-транспорта на уровне Европейского Союза. Очень много европейских правительств, и не только, пытаются стимулировать, в настоящее время, перевозку как можно более большого объема товаров по жд, так как негативное воздействие жд на окружающую среду - предельно низкий. ■