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Working Party on Rail Transport (Fifty-fifth session, 16-18 October 2001, agenda item 11 (a) and 11(b))

DEVELOPMENT OF A EUROPEAN CONVENTIONAL AND HIGH-SPEED RAILWAY NETWORK

<u>Transmitted by the Governments of Belarus, Czech Republic, Denmark, Germany, Hungary, Latvia, Lithuania, Netherlands, Slovakia, Slovenia, Sweden, Turkey, United Kingdom</u>

Note: During its fifty-third session (6-8 October 1999) the Working Party on Rail Transport requested Governments, the International Union of Railways (UIC) and the Organization for the Co-operation of Railways (OSZhD) to provide relevant information on the development of (i) a European conventional railway network and (ii) a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport) (TRANS/SC.2/192, para.35).

The Working Party may wish to consider the information received by the secretariat on this item, which is reproduced below.

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BELARUS

The Belarusian railway system is not integrated into the European high-speed rail network. Nevertheless, work is in progress to overhaul, modernize and develop the Second Crete Corridor (Moscow-Minsk-Brest-Warsaw-Berlin), so that it can handle passenger trains operating at 160 km/h. In May 1995 a quadripartite agreement on this matter was signed between the railway administrations of Germany, Poland, Belarus and the Russian Federation

CZECH REPUBLIC

(a) a European conventional railway network:

The modernization of railway corridors is now under way.

- (b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>
- * A study for the VRT has been prepared; construction projects are not considered earlier than after 2010. No connection to the air transport has been considered so far.

DENMARK

(a) <u>a European conventional railway network:</u>

No activities are planned so far.

(b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

10 Mill. DKK have been allocated to tests of the ERTMS-system in Northern Jutland. A proposal for a pilot project will be completed over the summer.

GERMANY

(a) <u>a European conventional railway network:</u>

Contractual agreements between Germany and all its neighbours on the development of international rail transport exist or are being prepared.

Reference is made to the following projects:

D/NL: Connecting the Betuwe Line (Rotterdam – Arnhem) planned in the Netherlands to the German network via Emmerich – Oberhausen – Cologne/Herne

D/DK: Jointly sponsored study of the feasibility of a fixed link across the Fehmarn Belt on the Hamburg – Puttgarden – Copenhagen route

D/PL: Joint project for upgrading the Berlin – Warsaw line, with the German section between Berlin and Frankfurt (Oder)

D/ÈZ: Agreement on modernized conventional rail services using tilting trains on the following routes:

- (a) Berlin Prague Vienna
- (b) Nuremberg Marktredwitz Prague

D/A: Coordinated upgrading of the railway infrastructure in the Austro-German Danube corridor between Passau and Salzburg, keeping pace with the transport demand on the following routes, in particular:

- (a) Nuremberg Passau (– Vienna)
- (b) Munich Mühldorf Sembach (– Vienna)
- (c) Munich Mühldorf Freilassing (– Salzburg Vienna)

D/A/I: Trilateral project for upgrading the Munich – Verona Brenner axis, with the German section between Munich and Kiefersfelden

D/CH: Agreement on

- (a) New high-speed line/upgraded line between Karlsruhe and Basel as the most important feeder line for the new AlpTransit route
- (b) Line improvements and use of tilting trains on the Stuttgart Zurich and Munich Lindau Zurich corridors to reduce journey times
- (b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

In addition to the projects listed under (a) above, the following high-speed rail links are planned:

D/F/L: Linking the German and French high-speed networks via Saarbrücken and Strasbourg as part of the Paris – Eastern France – Southwestern Germany high-speed link, with the following German sections:

- (a) Saarbrücken Mannheim
- (b) Kehl Appenweier

D/B: Connection to the Paris – Brussels – Cologne – Amsterdam – London (PBKAL) high-speed rail project via the German section between Aachen and Cologne

D/NL: Connection to the Amsterdam – Arnhem – Rhine/Ruhr high-speed rail link, with the German section from Emmerich via Oberhausen to Cologne/Herne

HUNGARY

(a) a European conventional railway network:

By 2007 the Vienna- Budapest line 180 km in Hungary of which 110 km apt for 160 km/h since 1997 will be equipped with ETCS (European Train Control System) level 1 and its 60 km section will be upgraded for 140 km/h speed.

Parallelly, the 230 km long Hungarian section of the Budapest -Bucharest line will be completely double tracked, equipped with ETCS level 1 and in a section, apt for 140 km/h. These developments are supported in 50 % by grants from the EU.

(b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

A joint venture is in founding process to undertake to construct a direct connection between the capital, Budapest and its airport, Budapest-Ferihegy, 20 km, by 2003, utilizing existing railway sections in part.

LATVIA

(a) <u>a European conventional railway network:</u>

85 km of railway lines were under the capital repair over the period 1997-1999 (300km of railway lines is foreseen to be modernized till the year 2002, 422 shunts were replaced over the same period. In order to increase railway corridor capacity the new train exchange points were constructed in the section Ventspils-Jelgava. The reconstruction of the bridge over the Mîlgrâvis channel (in Riga) were performed over the period 1998-1999. The modernization of LDz telecommunication network continues and in 2001 the equipment of shunts and signals centralisation with micro processor facilities will be finished. During the coming years the reconstruction of Ventspils railway junction, construction of receiving park in Rçzekne-2 station is foreseen.

(b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

Latvia has no high-speed railway lines and construction of these lines is not foreseen in the nearest future.

LITHUANIA

(a) <u>a European conventional railway network:</u>

At present the Lithuanian Railways sector is in the process of restructuring. In order to plan the implementation of Directive 96/48/EC in a proper way, the Working Group of the

railway experts has been established. In the nearest future the consultations on this issue will be started with the relevant transport institutions of the neighbouring states.

On 23 May 1997 the Government of the Republic of Lithuania granted the state priority for the construction of the European track railway state border with Poland – Kaunas. In 2000 a consortium of three companies GOPA (Germany), COWI (Denmark) and TKTI (Lithuania) drafted a study concerning the link of the European standard railway stretching from the state border with Poland to Kaunas; moreover, a consortium of four consultative companies drafted a concept on the modern transportation systems for the Kaunas logistics unit.

NETHERLANDS

Two studies have been carried out all related to the development of a high-speed railway network for goods:

- 1. "Snelspoor goederenvervoer" concerns the international high-speed railway of time-related goods (like flowers), which is an alternative for road transport and partially reduces congestion problems. Several transport concepts were investigated and compared. Combined transport of goods and persons turned out to be feasible. An example of combined transport is the Over Night Express Milan.
- 2. Rail distribution is the second study related to former study and concerning a national urban distribution network.
- 3. An underground transport system with pipelines and a railway connection to Schiphol airport for time-critical goods both for national as international market has been carried out. All three studies are related to distribution, market and rail developments.

SLOVAKIA

(a) <u>a European conventional railway network:</u>

Railway development plan issues from a forecast of the future transport development in Europe and from the principles of European transportation policy emphasising higher utilisation of ecological kinds of transport - particularly railway transport. Investment priorities of the development of the railway network are primarily the following ones:

- implementation of the programme of upgrading of railway transit corridors;
- upgrading of the border-passage stations;
- completion of crucial railway nodes and stations;
- upgrading of the remaining network;
- upgrading of communication network;

- upgrading of rolling stocks.

Within the upcoming years, investment activities will be focused on upgrading of the infrastructure of railway corridors:

- implementation of the programme of upgrading of the railway line: Bratislava Žilina Èadca state border with the Slovak Republic/Polish Republic;
- implementation of the programme of upgrading of the railway line: border of the Czech Republic/Slovak Republic - Kúty - Bratislava - Štúrovo - border of the Slovak Republic-Hungary;
- implementation of a reduced programme of upgrading of the railway line: Žilina Košice border of the Slovak Republic/Ukraine up to the level to provide for needs of operational maintenance until 2010.

Upgrading of transport permanent way will be primarily performed by implementation of investment intends within the set scope to extend its equipment and applicability through inclusion of advanced progressive elements and devices with overall improvement of technical conditions of these railway lines.

(b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

At present, no sections of high-speed network have been built on the territory of the Slovak Republic and within the network of the ŽSR. Within development activities, the ŽSR follows development of the European network of high-speed rail as well as development of an unconventional transport system with a focus on impact of their development upon the railway network. These results should be projected in improvement of commercial tracks to be able to provide for a and to quickly transport trains of high-speed rail in terms of quality.

SLOVENIA

The part of the Infrastructure Development Programme is the upgrading of the existing lines that comprises the increase of capacities and a higher level of the existing infrastructure network modernization as follows:

- short-term priority projects expected to be implemented within period 1997-2000
 - modernisation of signalling and safety devices on the line Ljubljana-Sežana a part of corridor No V (the works in process)
 - track renewal (105 km)
- medium-term priority projects expected to be implemented by 2005
 - construction of the second track Koper-Divaèa a part of corridor No. V
 - track renewal 175 km

- modernization of the signalling and safety devices on the line Pragersko-Ormož-Murska Sobota, Ljubljana-Jesenice, Pivka-Ilirska Bistrica
- a projects to be implemented after 2005
 - construction of the second track on the line Maribor-Austrian border (16 km) a part of corridor No X
 - construction of the second track on the line Ljubljana Jesenice (73,2 km) a part of corridor No X

The rehabilitation of the line Ljubljana-Zidani Most-Maribor-Šentilj in direction towards Vienna for speeds up to 160 km/h is foreseen for the period after 2000. According to the Infrastructure Development Programme the project takes part in the programme of the high-speed line network in the territory of Slovenia. The new high-speed line Trieste-Ljubljana as a part of the southeast European high-speed line is being under study. The realization of this line depends on the plans of the neighbouring countries and on the financial support of the European institutions. In February 2001 the Protocol on the corridor for a HS line (Variant M) Trieste - Ljubljana has been signed between the Ministry of Transport of the Republic of Slovenia and Republic of Italy.

SWEDEN

(a) a European conventional railway network:

Pending the Directive on conventional rail from Brussels efforts are made to get information making it possible to adapt to the new rules as smooth as possible.

Source: National Rail Administration

(b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

In December 2000 the Swedish Parliament passed a law on interoperability of the Trans European High Speed Network. This law is a consequence of Directive 96/48/EG.

The only Swedish airport directly linked to rail is Arlanda, north of Stockholm. There are three railway stations at Arlanda. Two of them serve the Arlanda Express (mentioned above). The third one is used for all other rail services. All interregional trains between Stockholm and stations north of Stockholm, including the high-speed X2000, stop at Arlanda. There is also a regional train service from areas south of Stockholm to and from Arlanda.

Source: National Rail Administration

TURKEY

(b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

Bosphorus Tunnel:

Replacing the present ferry connection this project will provide an uninterrupted railway connection between the European and Asian part of the railway lines in the Istanbul area. The construction works are planned to be started in 2001 (envisaged project duration: 4 years). The total length of the new line will be 76.3 km (13.3 km tunnel of it), the maximum speed will be 100 km/h.

Istanbul – Ankara Rehabilitation Project:

This line (567 km length) is a very imported corridor of the TCDD network, it is electrified end at present 165 km (29%) are equipped with two tracks. Because of worn out superstructure material and poor geometric standards the present maximum speed is limited to 120 km/h, the shortest travel time Istanbul-Ankara is 6.5 hours (average: 7.5 hours). The line is planned to upgrade, the project includes improving of the radii (from 250-1,000 m to 2,500-5,000 m), new track constructions and new signalling and electrification installations. That would allow a speed of 230 km/h. After completion of this project 74% of the corridor will be double tracked and the travel time will be shortened to 5 hours. In a second phase –by using new train sets- the travel time will be reduced to 4 hours. The evaluation of bids with 100% foreign loan has been completed and contract has been signed with awarded firms, and waiting for approval of foreign credit by State Treasure. The project cost is 441 M. EURO. Project duration is 36 months.

Istanbul – Ankara New High-Speed Railway:

It is envisaged to build a new high-speed railway line between the two metropolis. The existing 567 km route will be shortened to 417 km, the future travel time from Istanbul to Ankara will be reduced to 2,5 hours. Feasibility study and detailed project design are available, the project duration is envisaged for 4 years.

UNITED KINGDOM

(a) a European conventional railway network:

The United Kingdom has participated fully in negotiations concerning the directive on the interoperability of the trans- European conventional rail network, a Common Position on which was adopted in November 2000.

The Commission is now proposing a new directive on the interoperability of the trans-European conventional rail network. It responds to request from the Council and the Parliament for proposals on the integration of conventional rail systems. The conventional network includes all lines on the TEN. The Council has adopted a Common Position, which was endorsed by the European Parliament in March 2001.

(b) <u>a European high-speed railway network (including information on the complementarity between high-speed rail and air transport, regional development, regional transport and urban transport):</u>

The United Kingdom has not yet completed full implementation of Directive 96/48 EC on the interoperability of the trans-European high speed rail system: this is due largely to the fact that the Technical Specifications for Interoperability have not yet been finalized, and it was not possible to enforce future obligations under United Kingdom domestic law. However, new legislation, which entered into force in February 2001, has made it possible to implement the Directive, and implementing Regulations are expected to be in place by autumn 2001. The lines covered by the Directive are the West Coast Main Line, East Coast Main Line, Great Western Main Line between London, Bristol and Cardiff, and the Channel Tunnel Rail Link (CTRL)

The CTRL project involves the construction and operation of a 109km high-speed railway between Cheriton at the Channel Tunnel and St Pancras in central London. New stations at Ebbsfleet, Stratford and St Pancras will be served by the route and will provide the basis for extensive regeneration in these and the surrounding areas. The CTRL will cut journey times on the route by 35 minutes, and increase capacity. The project is a priority TENs link which will form part of the Paris-Brussels-Köln-Amsterdam-London high-speed train network.

The link is being taken forward as a Public Private Partnership (PPP) project. After a competition to choose the private sector promoter of the CTRL project, the Government signed a Development Agreement with London and Continental Railways Ltd (LCR) in February 1996, whereby LCR would design, build, finance, operate and maintain the new link. In January 1998 LCR informed the Government that, because of the slower than anticipated growth of the Eurostar business, it was unable to fully finance the building of the new railway and the project was consequently restructured. Under the new agreement LCR retains ownership of Eurostar (UK) Ltd, but day-to-day management has been assumed by a consortium comprising National Express Group plc, British Airways plc, SNCF and SNCB.

LCR is now constructing the CTRL in two sections with Railtrack playing a full role in both. Work on Section 1, which runs from the Channel Tunnel to Fawkham Junction in North West Kent, began in October 1998. It is expected that construction on this section will be completed in 2003, at which point Railtrack (UK) plc is committed to purchasing the Section 1 assets for the actual cost of construction. Section 2 will continue through from North Kent to St Pancras and construction is expected to start in July 2001 with the entire Link anticipated to open in 2007. Railtrack have agreed to waive their option to acquire Section 2 on a similar basis to Section 1. Instead LCR will retain ownership of Section 2 and Railtrack will be the operator of both sections.

The entire project is being financed primarily through LCR borrowing comprising a combination of commercial debt, Government Guaranteed Bonds and Government Capital Grants worth £3.6 billion (in 1997 prices). The expected cost of construction remains unchanged at £1.7 billion for Section 1 and £2.5 billion for Section 2.

TRANS/SC.2/2001/18 page 10

The SRA will be taking over all DETR's functions in respect of all issues covered by the High Speed Interoperability Directive and the related Technical Specifications for Interoperability as soon as the high speed TSIs enter into force as planned in the Autumn.