

EN

EN

EN



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 18.10.2007  
SEC(2007) 1325

**COMMISSION STAFF WORKING PAPER**

*Document accompanying the*

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE  
EUROPEAN PARLIAMENT**

**Towards a rail network giving priority to freight**

**SUMMARY OF THE IMPACT ASSESSMENT**

{COM(2007) 608 final}  
{SEC(2007) 1322}  
{SEC(2007) 1324}

# COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

## Towards a rail network giving priority to freight

### Summary of the impact assessment

#### 1. BACKGROUND

##### 1.1. Small market share for rail freight

Freight transport grew by 2.8% per annum between 1995 and 2005, and has been outstripping GDP growth (2.3% per annum) for a number of years.

However, rail freight transport accounted for only a small proportion of this growth, with the result that its market share steadily declined, falling to 10% in 2005<sup>1</sup> (16.5% if only inland transport is taken into account), its lowest level since 1945.

##### 1.2. The railways are adapting too slowly to the new economic models

Industrial production in Europe is shifting from basic products, which are frequently carried by rail, to finished products. Transport between different production sites, in the context of just-in-time production, entails, in particular, high standards of reliability based on meeting tight deadlines, and in this respect road transport offers a suitable, efficient logistical solution and greater flexibility.

At present the most dynamic segment is combined transport, which in 2004 increased by 16% in international traffic. The high growth rate in container traffic<sup>2</sup> opens up the prospect of considerable potential growth for the railways. Whole trainloads may be economic and competitive over long distances and, in some circumstances, over short and medium distances.

However, single wagonloads, which are rarely economic, are experiencing many difficulties in Europe, even though they represent 50% of all rail freight. A drastic reduction in single wagonload traffic could have very disturbing consequences for the entire transport system in the European Union, given that road transport is the direct competitor in this segment.

##### 1.3. The difficulties facing rail freight

In general, the rail operators are still not sufficiently attuned to their customers' needs and expectations, which are becoming increasingly demanding, mainly concerning transport reliability, price, available capacities, information management, transport times, and

---

<sup>1</sup> Eurostat.

<sup>2</sup> In the port of Rotterdam container traffic is forecast to increase from 9.2 million TEU in 2005 to 22 million TEU in 2020.

flexibility. Rail freight is therefore encountering a number of difficulties which, to some extent, explain its inability to increase its share of the market.

- In general, the commercial speed of rail freight is still too low compared with road transport<sup>3</sup>.
- The railways' difficulties as regards capacities mainly arise from infrastructure problems (lines and terminals), and shortcomings in relation to services (within terminals and marshalling yards, and for supplies of fuel, etc.)
- Freight does not have priority in the event of saturation of the infrastructure, and this detracts from its performance, since a freight train may be considerably delayed by late or stationary passenger trains.
- Information systems do not enable the position of goods transported and of rolling stock to be known in real time.
- This results in poor punctuality, namely 53%<sup>4</sup> for combined rail transport and an even lower figure for conventional rail freight.
- A very considerable proportion of costs relates to the depreciation of equipment (which remains excessively expensive) and excessively frequent immobilisation.
- Bottlenecks affecting cross-border operations. The national authorities and the different infrastructure operators are not always sufficiently coordinated, with the result that the movement of international trains is often affected by administrative "obstacles".

## 2. MEASURES ALREADY TAKEN AND THEIR RESULTS

For some fifteen years the European Community has been pursuing a railway policy aimed at reinvigorating the rail freight sector and reversing its decline compared with road transport to create a solid single market based on a sustainable transport system, involving the gradual opening up of the freight market to competition, a process completed in January 2007, and directives on interoperability and safety. In the context of the Trans-European Transport Network (TEN-T), the Commission has identified several priority corridors, most of them railway routes, which could benefit from Community support, both financially<sup>5</sup> and in terms of coordination between the Member States crossed by each of the routes.

As part of the Commission policy for the deployment of the European system ERTMS, six major rail freight corridors have been identified, and in several of them joint coordination structures have been set up by the governments and infrastructure managers concerned. However, much still remains to be done in order to achieve an integrated European rail market.

---

<sup>3</sup> At present goods are carried by road at an average speed of 50 km/h.

<sup>4</sup> According to UIRR statistics, in 2006 only 53% of combined transport trains arrived at their destination less than 30 minutes late.

<sup>5</sup> (A TEN-T budget has been created; it amounts to €8 billion for the period 2007-2013, a large part of this sum being earmarked for railway infrastructure).

### **3. THE OBJECTIVES OF A NETWORK GIVING PRIORITY TO FREIGHT**

In view of these difficulties, new initiatives are needed to create a freight-oriented network, which offers a way of making European railways more efficient and is essential to boost rail freight business in Europe.

#### **3.1. The specific objectives**

In order to achieve the overriding objective, three specific objectives will be pursued to make rail freight more efficient on the freight network: increasing commercial speeds, improving reliability and increasing capacities. This will make the railways more competitive compared with the roads.

Higher commercial speeds and increased capacities will also make it possible to reduce costs and therefore to increase competitiveness. However, no measures will be proposed to make the railways more flexible since that has nothing to do with the creation of corridors or information management and is already covered by ongoing Community initiatives.

#### **3.2. The options considered**

Four possible options have been considered to attain the objectives set out above:

*3.2.1. Option A: to maintain the status quo, with no new Community initiative.*

*3.2.2. Options B1 and B2: political support from the Community for freight-oriented corridors. Analysis of the most efficient services and proposals for the funding of freight-oriented corridors, either in the context of the TEN-T programme or under a future Financial Perspective. The scope of the legislation and funding required for these two options differs.*

*3.2.3. Option C: a strong political commitment from the Community for the creation of a network exclusively dedicated to freight. Funding of the creation of dedicated freight corridors in the context of a specific Community programme, and a proposal for a Regulation on the creation of a dedicated freight network.*

#### **3.3. The main railway routes: the corridors**

Because of the structure of the railways, it is necessary to focus, as a priority, on the links between business centres (in other words, between ports and terminals) since that is where the railways are likely to be more productive than road transport. This is aimed at consolidating flows and reducing production costs along the main routes - the corridors - which make up the European rail network.

The corridors concerned are part of the networks shown, as guidance, on the map below. This map has been drawn up on the basis of the existing European networks, i.e. the TEN-T network defined in Decision No 884/2004/EC and the freight network described in Directive 2001/12/EC. It corresponds to (and includes) the networks defined in the context of the European research projects Trend, Reorient and New Opera and the ERTMS-ETCS deployment network.



# INDICATIVE SCOPE for a RAIL FREIGHT-ORIENTED NETWORK



- Rail freight-oriented network
- Railway Trans-European Network as defined in Decision 884/2004
- Third countries

Cartography: DG TREN - 26/07/2007  
© EuroGeographics 2001 for the administrative boundaries

## **4. EVALUATION OF OPTIONS**

### **4.1. The options as a way of meeting the objectives of this initiative**

International rail freight is impaired by three major factors: the slowing-down of traffic at bottlenecks (generally in the vicinity of built-up areas), border crossings, during which considerable time may be lost due to administrative or technical constraints, and delays in access to railway services (terminals, marshalling yards). Average commercial speeds are significantly affected by these factors and, as they concern the infrastructure, they also have an impact on freight capacities and reliability.

In view of the measures presently being taken in particular to simplify border crossings for rail traffic, option A should lead to improvements in the entire network which gives priority to freight, though not necessarily in a uniform manner or to a sufficient degree.

Options B1 and B2 should make it possible to reduce border crossing times considerably in all corridors. It should also lead to the coordinated use of infrastructure (by infrastructure managers on either sides of the border) and to its more efficient use, thus enabling average commercial speeds within the corridors to increase. Option B2, which demands greater cross-border coordination than option B1, therefore seems to be a more effective way of reducing the impact of border crossings on journey times.

The measures proposed to improve access to rail services (by means of greater transparency and increased capacity) should also help to shorten the waiting times which affect these services.

Option C would obviously provide the best way of attaining the objectives. Without mixed traffic, it would make it much easier to optimise the use made of the lines. Corridors could be made available which are entirely dedicated to freight. However, a network entirely dedicated to freight would offer far more infrastructure than the Union will need over the next 15 years. There are only a few small sections in Europe where demand is likely to be so great by 2020 that a full double-track line entirely dedicated to freight would be fully utilised.

### **4.2. The economic, social and environmental impacts of the options**

With option A, the market shares for which the railways and roads as transport modes account will change very little and the external transport costs (air pollution and climate change) will continue to rise rapidly. However, noise emissions, a critical aspect of rail transport, are not likely to increase.

The impact of options B1 and B2 on passenger transport will be one of the greatest in societal and economic terms. Given that most lines which give priority to freight on the European network have not reached saturation point, improving the reliability of these sections should not lead to much passenger transport being diverted. Passenger transport should become more reliable (optimisation of track allocation benefits both passenger and freight transport) but would become slightly less efficient (journey times would be likely to increase by about 10% in most cases).

As far as the environment is concerned, options B1 and B2 would provide the best results, with fairly high savings on external environmental costs compared with the costs avoided with option A.

In economic terms, options B1 and B2 seem to be the most balanced, especially in view of the lower costs of these options to society compared with option C.

The environmental impact of option C is more nuanced as the cost of building new lines reduces that option's advantage over options B1 and B2 in terms of the external costs avoided.

#### **4.3. Other evaluation criteria**

The status quo option A would not give rise to any additional costs compared with measures and programmes already being carried out. However, the process of coordination initiated by infrastructure managers could take a great deal of time and should be speeded up.

The operational measures provided for in the proposals for legislation for options B1 and B2, such as measures and instruments for optimising corridor use and the deployment of ERTMS, can be carried out in the short to medium term and offer a higher cost-benefit ratio than infrastructure-related measures, which take longer to carry out and require far higher funding. However, there are also limits to what operational measures can achieve and, as a second step, structural measures are needed to flank them.

The cost of structural measures for the infrastructure can be estimated at about €80 billion. These concern, firstly, measures to harmonise and improve corridor capacity in terms of maximum train length, at a cost of €20 billion, and, secondly, large-scale measures to eliminate bottlenecks, at a cost of €60 billion.

The opposition shown by some local authorities in response to the need to reorganise passenger transport in some areas could be one of the greatest risks as far as these options are concerned. However, an increase in the number of goods trains moving around built-up areas very often means a decrease in the number of lorries travelling through them.

With option C, the cost of developing an entire network with a total length of about 25 000 km, as shown on the map, amounts to about €170 billion

In terms of cost, it is most profitable to use a line to its full capacity. Even if a journey takes 33% longer, this option is less costly than increasing the capacity. If capacity needs to be increased, alternative solutions (re-opening mothballed lines, by-passes) should be examined to see if they would not be cheaper.

The need for massive investments to construct a separate network for freight and the long lead time before which this can be achieved pose a major risk. The financial resources which the Member States, infrastructure managers and the Community are able to mobilise are also limited.

#### **4.4. Conclusion of evaluation of options**

Overall, **options B1 and B2 seem to provide the most balanced way of attaining the objectives described in section 4.** These consist of providing fresh political, financial and legislative impetus while complementing and strengthening ongoing measures. **Option A**

would not seem to be enough, and option C seems to be oversized compared with the short and long term challenges considered in this impact assessment.

Options B1 and B2 would use different means to abolish certain obstacles to improving the competitiveness of freight. **The focus, both financially as well as politically and in legislative terms, should be on the most effective measures which can be implemented in the shortest time (structural measures).**

Priority should therefore be given to **the elimination of operational and administrative bottlenecks. This can be done in the short to medium term and does not require excessive financial resources at least.** The work of eliminating the structural bottlenecks should be carried out and financed by the parties concerned (Member States and infrastructure managers), with Community support as currently provided for in the context of the TEN -T and the Cohesion Fund.

Nonetheless, the idea of a dedicated freight network should not be completely ruled out. The solution recommended here is to adopt a gradual approach and to consider how the measures can be achieved within an acceptable timeframe and at an acceptable cost. The implementation of options B1 and B2 could therefore be a first step before, in the longer term, dedicated freight corridors are developed.

## **5. IMPLEMENTATION OF OPTIONS ADOPTED: TIMETABLE AND MONITORING**

### **5.1. Planned timetable**

October 2007	<b>Approval of the Communication</b>
1st half of 2008	<b>Structured consideration of the options proposed in the Communication</b>
	<b>Impact study of the measures adopted</b>
	<b>Proposal for legislation</b>
2009/2010	<b>Adoption of proposal for legislation</b>

### **5.2. Monitoring of implementation**

Monitoring will essentially consist of further analysing the measures proposed, selecting those which are most relevant, implementing them and ensuring that they are applied by the parties concerned. At each of these stages, the main parties and all Commission departments concerned will be consulted and involved.

Furthermore, a report on the Rail Market Monitoring Scheme will be published when this initiative is launched. This will make it possible to observe at regular intervals the extent to which rail freight transport is boosted by the development of a network giving priority to freight.