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Bruges, 7th May 2004

## **Abstract**

The benefits of rail freight over other means of transportation are clear: more environmentally sustainable, capable of transporting greater loads and free of the congestion and accidents that afflict Europe's road networks. Yet for the last three decades the percentage of Europe's goods that are transported by rail has continued to drop, from more than 20% to only 8%. At the same time, other modes of transport, and especially road haulage, have boomed. As economies grow, so the need for freight transport grows; the challenge is thus to ensure that rail gains a greater share in the future.

This thesis sets out to examine the rail freight sector and ascertain its potential for improvement. It is opportune to deal with this matter as the European Commission has, since the mid-1990s, initiated considerable legislation with the expressed aim of rejuvenating rail freight.

Starting with a short historical overview to explain why rail finds itself in its present predicament, the developments in EU rail policy are charted and analysed. As attention was drawn to the plight of the railways during the 1990s, so it became clear that a Europe-wide solution to the problems was required. The European Commission was especially concerned by cross-border freight transport, where rail transport was simply not making the grade.

After slow progress initially, agreement was generally reached that market liberalisation was the best approach for the railways, the major first plank of which was completed in 2003. An initial analysis of the impact of the reforms already enacted, and an explanation of the many outstanding problems, show that the experience of liberalisation is so far mixed.

It is important to not see liberalisation as being separate from a range of other issues that are of importance to the railways, the most crucial of which is infrastructure investment. By looking at the means of funding of network improvements, and the at the comparatively minimal role the European Union can play in these matters, a range of other reasons for rail freight's predicament are clarified. However, a number of exemplary and innovative projects show how the potential of the railways can be realised.

The railway industry has long complained that it simply cannot compete with roads due to a price difference that is impossible to overcome. The last section of this thesis deals briefly with this matter, looking at the so-called 'Eurovignette' system of road pricing as means to put the different transport modes on an even footing. While the benefits of such a scheme are clear for rail, it is as yet too early to pin too many hopes on satisfactory legislation in this area.

Rail freight remains in a fragile position, but it is clear from the analysis and research conducted that the sector is changing and there are grounds for some cautious hope that the situation will continue to improve.

## **Keywords**

Railways

Rail Freight

EU Transport Policy

Liberalisation

Trans-European Networks

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# 1 Introduction

## 1.1 Rail freight: not the force it once was

In 1970, rail enjoyed a 20.1% share of the rail freight market in Europe. In 1980 the figure was 14.7%, in 1990 11%. By 1999, rail's market share had declined to 8.0%<sup>1</sup>. Such an alarming decline progressively became cause for concern within the European Commission and the member states of the European Union. The reasons for the decline, and the patchwork of measures put in place with the intention of stemming the decline will be set out in the following chapters.

Before starting an analysis of the decline, it is necessary to reflect on the nature of rail freight. If transport by rail should be condemned to history in Europe due to inherent failings, then an analysis such as this would be of little relevance. Yet Europe's economies continue to grow, and so does our need for transport, of goods as well as people. The Single Market, and the forces of globalisation more generally, have increased the level of interdependency of our economies, and as Neil Kinnock argues, the potential for rail freight is thus more important than ever:

*"Moreover, since more than 70% of freight transport is over distances of 150 kilometres, more than 20% is over 500 kilometres and the average distance over which goods are transported increases by 1% every year, the potential for growth [in railways] is obvious".<sup>2</sup>*

As congestion of Europe's roads becomes more and more severe, so alternative approaches are urgently required. The statistic that "a double track line of 10 metres width can support the same number of passengers

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<sup>1</sup> European Commission, *Revitalising Europe's Railways: Towards an integrated European railway area*, Office for Official Publications of the European Communities 2003, p. 2

<sup>2</sup> Speech by then Commissioner for Transport, Neil Kinnock, The Economist Conferences, Hotel Sheraton, Brussels, 16.01.1998: <http://europa.eu.int/comm/transport/global/speeches/sp983.htm>, consulted 26.04.2004

as a motorway 135 metres wide”<sup>3</sup> demonstrates the role that railways could play in our densely populated continent.

Dealing with transport policy is no easy task, as many governments in EU member states and the European Commission have found to their cost. As traffic flows grow and develop, politicians feel they are responding to a tide of problems, rather than actively shaping the direction of transport policy. When these difficulties are examined at EU level, the situation looks even more hopeless; 25 individual and often contradictory policies, and the limited organisational capacity, restricted budget and Byzantine political structures of the European Union, mean developing coherent answers to Europe’s transport challenges is tough.

By taking the example case of rail freight in Europe, many issues will be raised in the following pages that have parallels across European transport policy, and even in other areas of European Union policy making. The study will begin by explaining the historical development of railways in Europe, and will trace the roots of EU legislation to deal with the problems in the sector. Having set the scene and dissected the reasons for the predicament of the railways, targets for rail freight will be considered, before an evaluation of the developments that have taken place in the last decade will be undertaken. In the conclusion, all the strands of the analysis will be brought together to establish whether rail freight is indeed on the right track to recovery.

## **1.2 Thesis objectives and limitations**

Firstly, it is worth reflecting on why this study should focus on railways. As pressure grows on Europe’s transport networks, and the impact of global warming thanks to the burning of fossil fuels becomes more and more evident, so it becomes necessary to look for environmentally friendly transport. With the potential to power railways with electricity generated using renewable energy sources, trains offer an extremely appealing and environmentally friendly means to get individuals out of their motorcars,

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<sup>3</sup> International Railway Union (1990), “Report on EC Railways”, quoted in T. Kiriazidis, *European Transport: Problems and Policies*, Avebury, Aldeshot 1994, p. 30

and freight off trucks. In comparison to other alternative transport means, such as pipeline or inland waterway, the extensive network of railways in Europe means that rail transport can offer a real everyday alternative for citizens and businesses from Helsinki to Lisbon and Edinburgh to Budapest.

The focus of this study is rail freight, as opposed to passenger transport, for two main reasons. Firstly, the relative performance of rail freight has been more alarming than the performance of rail for passenger transport. Secondly, as a result of the more alarming situation for freight, it is in this area that the European Commission has concentrated its legislative efforts in the last few years, most importantly with the opening-up of the Trans-European Rail Freight Network to competition from 15<sup>th</sup> March 2003 onwards<sup>4</sup>.

While the focus of this work is to assess the performance of the rail freight sector, some means of comparison with other modes cannot be avoided. Further, as the future of European transport policy will require strategic decisions to be taken among a range of options, a pure analysis of rail freight would not be logical. While pipeline, inland waterway, short-sea shipping, and, in certain cases, airfreight, offer alternatives to rail, the main conflict in terms of strategic direction for freight policy since the start of the processes of European integration in the 1950s has been the matter of road vs. rail. The scope of both modes - serving many thousands of towns and individual industrial plants across Europe - far outweighs that of the other modes listed, and especially concerning infrastructure pricing (see Chapter 7), the comparison between the two is extremely important as a means to explain the predicament of rail freight.

While constraining the field of research may be a relatively simple task, determining whether policies pursued in the area of rail freight are having the desired impact is considerably more difficult. This question has not only proven to be a considerable challenge for this work. As will be shown

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<sup>4</sup> *Ibid.*, p. 4



in Chapter 4, ambiguity over target setting has even afflicted the European Commission. Further, as the sector has been in a state of considerable flux since the mid-1990s, it is extremely difficult to determine what could be determined as decline, and what could be considered as market restructuring.

The process of liberalisation of the rail freight sector has proven to be, and remains, the most important policy development in recent years. Indeed, the process will be ongoing at least until 2008<sup>5</sup>. The main part of the analysis below therefore focuses on liberalisation, its shortcomings and consequences. Related to that are two supplementary fields - infrastructure investment, and the challenge of competition from other modes of transport that are examined towards the end of this work. The challenge is to ascertain which combination of factors has had the most positive impact on the rail sector.

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<sup>5</sup> *Ibid.*, p. 8

## 2 European railways: a history of national cooperation

*"For reasons that are understandable but regrettable, the railways' natural tendency is to favour national solutions"<sup>6</sup>.*

### 2.1 Setting the scene for the future, 1890-1950

To understand the present difficulties facing the railway systems in Europe, it is necessary to look back over more than a century of cooperation between governments and railway industries. Despite the considerable activity internationally (see below), railways have remained a principally national matter as, even in small states, the vast majority of railway traffic has always been, and even today is, within the national boundaries, meaning national systems have developed independently from each other. The gauge of the rails is at least common across most of Europe, with the exception of Iberia and the former Soviet Union, but the permitted size of wagons, the height of platforms, whether trains drive on the left or right, types of signalling and security systems, and the voltage of electric locomotives, all vary from country to country<sup>7</sup>. These differences date back to a time before the European Union even existed. It is within this context that any EU policy must be developed.

International rail traffic had started to a limited extent in the mid nineteenth century. Whereas passengers could transfer reasonably easily from one train to another, passing on foot through customs controls, the matter was far more complex for freight. At the time of the 1846/47 foundation of the Association of German Railway Administrations (Verein Deutscher Eisenbahnverwaltungen), Germany was still a patchwork of small states making such matters extremely complex<sup>8</sup>. It was clear that a wider solution was required; this led to the signing of the *Convention*

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<sup>6</sup> Speech by Neil Kinnock, 16.01.1998, *op. cit.*, note 2

<sup>7</sup> For a comparison of the differences of technical systems, please see H. Stevens, *Transport Policy in the European Union*, Palgrave Macmillan, Houndmills 2004, p. 88-102 and COM(2001)0370 White Paper "European Transport Policy for 2010: time to decide", p. 27-36. The list of technical difficulties stated here is by no means comprehensive. For a detailed analysis of measures to overcome these matters, please see Chapter 6 below.

<sup>8</sup> K. Button quoted in H. Stevens, 2004, *op. cit.*, note 7, p. 26

*international concernant le transport marchandises par chemins de fer* - CIM - in 1890, the so-called Berne Convention. As a follow-up to the Bern Convention, the International Railway Transport Committee (Comité international de transports ferroviaires - CIT) was established in 1902 as a forum for cooperation between railway administrations. An addition to the 1890 agreement was put in place with the signing in 1928 of the *Convention internationale concernant le transport voyageurs et bagages par chemins de fer* - CIV. The CIT and CIV agreements facilitate contractual matters between railway administrations by putting in place a standard system in international law to deal with obligations and liabilities of railway companies. The agreements have gradually become applicable to the whole of the European mainland and were valid at the time of the establishment of the EEC and, with some amendments, remain intact in the signatory states<sup>9</sup>.

Due to the lack of private enterprises in this sector, the international organisations that formed around the European railways were not originally independent of the power of national governments. However, at the international level the railways were freer to organise themselves. The prime organisation initially was the Verein Deutscher Eisenbahnverwaltungen (see above) which in the years until 1933 expanded to include the Austro-Hungarian, Luxembourg, Dutch, Romanian, Danish, Norwegian, and Swedish railways, and became the Association of Central European Railway Administrations (Verein Mitteleuropäischer Eisenbahnverwaltungen - VMEV). Although curtailed by the outbreak of war, the VMEV was nevertheless relevant as a forerunner of a later European common traffic policy. It was a discussion and planning platform for railway politics and also carried out important work to create common negotiation and decision-making structures. Further, in

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<sup>9</sup> These agreements exist to this day under the auspices of OTIF – Intergovernmental Organisation for International Carriage by Rail - [http://www.otif.org/html/e/pres\\_info\\_generales.php](http://www.otif.org/html/e/pres_info_generales.php), consulted 12.04.2004. Overview of railway history in Europe from H. Stevens, 2004, *op. cit.*, note 7, p. 91-96 and P. Bauchet, *Les transports de l'Europe: La trop lente integration*, Economica, Paris 1996, p. 18-22

terms of practical measures, the VMEV contributed to the standardization of technical standards<sup>10</sup>.

An efficient cross-border train connection also requires service and logistical agreements, and coordinated timetables. Regular conferences were held from 1870 onwards to deal with these matters and for goods traffic these conferences developed in 1930 with the signature of a common statute (Livret indicateur international marchandises) and under the name of European conference of goods train timetables (Conférence Européenne des Horaires des Trains de Marchandises). The expansion of the railways and the more comprehensive use of freight wagons across borders led to the agreement in 1921 of the International Vehicle Rules (Regolamento Internazionale Veicoli - RIV) which established a common system of standards and categorisation of goods wagons in all European countries with the standard (1435mm) rail gauge.

In terms of cooperation between railways companies, the International Union of Railways (Union Internationale des Chemins de Fer - UIC), founded in 1922, is the most important organisation established in the pre-War era. With its aim of creating uniform conditions for the establishment and operation of railways, it is today a worldwide organisation with nearly all of the European railways among its members. The role of UIC from its inception is to promote cooperation between railways at world level and to carry out activities to facilitate international transport by rail, most importantly by preparing common standards, regulations and recommendations, and by promoting exchange of best practice and experience<sup>11</sup>. It is worth noting the Community of European Railways (CER) developed from within the UIC in the late 1980s<sup>12</sup>, hence considerable reference to CER and a less importance for UIC in the following chapters.

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<sup>10</sup> History of the VMEV from [http://www.fh-merseburg.de/~nosske/EpocheII/DRG/e2d\\_9811.html](http://www.fh-merseburg.de/~nosske/EpocheII/DRG/e2d_9811.html), consulted 28.04.2004, and H. Stevens, 2004, *op. cit.*, note 7, p. 91-96

<sup>11</sup> Information about the founding of the UIC, and the RIV standard, from the UIC website, especially: [http://www.uic.asso.fr/s\\_apropos/apropos/presentation\\_en.html](http://www.uic.asso.fr/s_apropos/apropos/presentation_en.html), consulted 10.04.2004

<sup>12</sup> T. Kiriazidis, 1994, *op. cit.*, note 3, p. 30

## **2.2 Safeguarding national interests, 1950-1985**

It was clear that considerable attention would have to be paid to Europe's transport networks due to the destruction inflicted by World War II. The first major steps were taken in the context of the Organisation of European Economic Co-operation (OEEC) that, through The European Conference of Transport Ministers (Conférence Européenne des Ministres des Transports - CEMT) launched a number of valuable initiatives. These included the establishment of European Company for the Financing of Railroad Rolling Stock (EUROFIMA), the EUROP pool of goods wagons, and the Trans-Europ-Express (T.E.E.) project<sup>13</sup>.

Initially, railways had to respond to the creation of the European Coal and Steel Community in 1952<sup>14</sup> although at this stage there was no explicit reference to transport policy within the organisation that was to form the basis of the European Economic Community and eventually the European Union. The abolishment of discriminatory tariffs on coal and steel within the signatory states, goods most often transported by rail, took place in 1953. Previously the railways had carried nationally produced products at rates lower than those for imported goods. According to Abbiati, more than 200 tariffs relating to rail freight had been removed by 1954<sup>15</sup>. While individual cuts in tariffs hit railways hard, the economies in Europe were generally growing, leading to subsequent increases in the tonnage of goods transported by the railways. This early experience - with railways being forced to adapt to changes being driven by industry - has parallels throughout the post-War period.

The 1956 Spaak report, which provided the framework for the later negotiations of the Treaty of Rome set out 3 aspects of transport policy that would need to be dealt with in the European Economic Community:

- no discrimination on grounds of origin or destination in charging for EC passengers or freight;

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<sup>13</sup> For more detailed information about the CEMT, please see: <http://www1.oecd.org/cem/index.htm>, consulted 10.04.2004

<sup>14</sup> H. Stevens, 2004, *op. cit.*, note 7, p. 92. Non-discriminatory pricing under Article 70 of the Treaty of Paris (1951).

<sup>15</sup> C. Abbiati, *Transport and European Integration*, EC Publications Office, Luxembourg 1987, p. 59

- the development and financing of infrastructure investment; and
- the formulation of a common transport policy.<sup>16</sup>

The first of these points had already been successfully implemented in the early 1950s for transport of coal and steel and hence proved to be uncontroversial, and can be found in Article 79 (now 75) of the Treaty of Rome (1958). Financing of infrastructure investment was not given explicit mention in the Treaty of Rome as this was supposed to be covered by the general provisions of the Treaty. A formulation of a common transport policy proved harder to achieve than either of the first two points, such was the division of opinion of the states concerning the role of the market versus the role of the state in transport policies<sup>17</sup>. This meant that the Articles of the Treaty of Rome relating to transport policy are brief and do little more than define the boundaries of a future common policy. However, the reference in Article 74 (now 70) to the role of transport as playing a role in meeting 'the objectives of this Treaty' is significant. As the economic objectives of the Treaty are essentially of a liberal nature, this Article implies that competition in the common market should not be distorted. These distortions caused due to a lack of common European Union transport policies were the main reason for action from the Commission in the 1990s, problems made acute due to the lack of agreement and progress in the early years<sup>18</sup>.

Until the 1970s, policy at European level concerning railways remained embryonic. During the 1970s, a number of factors contributed to realisation that the situation had to change. The oil crises, the increasing political significance of environmental protection, and the heightened importance of maritime transport due to the 1973 enlargement, led to renewed reflections on transport policy, sewing the seeds for the policies that were to come later.

### **2.3 Foundations of today's policies, 1985-1995**

Network industries such as the railways had until this point remained relatively untouched due to the provisions on Article 86/2 (then Article 90)

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<sup>16</sup> H. Stevens 2004, *op. cit.*, note 7, p. 37

<sup>17</sup> H. Stevens, 2004, *op. cit.*, note 7, p. 37-39 and C. Abbiati, 1987, *op. cit.*, note 15, p. 29-33.

<sup>18</sup> T. Kiriazidis, 1994, *op. cit.*, note 3, p. 29-30

of the Treaty that states that the Treaty rules apply “insofar as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them”<sup>19</sup>. Using this excuse and a notion that transport was somehow a public good separate from other economic sectors, it was simply assumed until the late 1980s that transport should be left alone<sup>20</sup>.

However, political pressure was mounting at this time from an increasingly confident European Parliament who took the Council to the Court of Justice in 1983, leading to the 22 May 1985 judgement in *Parlement c. Conseil, 13/83*, that the Council had failed to implement its Treaty obligations concerning the liberalisation of international transport - the so-called ‘inactivity verdict’<sup>21</sup>. This case, together with the Single Market Programme of European Commission, has led Teutsch and Kerwer to claim 1985 was the “watershed for supranational transport policy”<sup>22</sup>. When in 1986 the Single European Act was signed, it became clear that no area of policy could escape the Single Market winds of change blowing through the European Commission, although the 1985 White Paper on the internal market had not considered railway policy of direct relevance<sup>23</sup>.

The Commission however proposed what became Directive 91/440/EEC relating to the development of railways in 1989, that was agreed in July 1991. This Directive extended the principles of financial transparency and autonomy of the railways and introduced one major reform: the separation of the accounts of rail infrastructure and rail services. The idea of service and infrastructure separation remains controversial to this day<sup>24</sup>, meaning the Commission had made its proposals at a very early

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<sup>19</sup> Article 86/2, Treaty Establishing the European Community (TEC)

<sup>20</sup> J. Pelkmans, “Making EU Network Markets Competitive”, in *Oxford Review of Economic Policy*, Vol. 17 No. 3 pp. 432-456, Oxford University Press and The Oxford Review of Economic Policy Limited, Oxford 2001, p. 434

<sup>21</sup> D. Kerwer & M. Teutsch, “Transport Policy in the European Union”, in A. Héritier et al., *Differential Europe: The European Union Impact on National Policymaking*, Rowman & Littlefield Publishers, Inc., Lanham, Maryland 2001, p. 29

<sup>22</sup> *Ibid.*

<sup>23</sup> H. Stevens, 2004, *op. cit.*, note 7, p. 96

<sup>24</sup> See speech by James Evans, Secretary General of the European Rail Infrastructure Managers (EIM), 25.09.2002, downloaded from <http://www.eimrail.org/>, consulted 30.03.2004, in which he states that many have seen separation of infrastructure as a “schism” in the family of the railways. Evans,

stage with only the first stages of British, Swedish and to a certain extent Swiss rail reforms to use as a model.

However, if the Commission had been hoping for major advances towards the opening of the railway market to intramodal competition, the moves made in 1991 were largely disappointing. No obligatory erosion of the national monopolies resulted from the decisions taken, and it has been argued that a number of countries, but especially France and Italy, initially implemented the 1991 Directive in as minimal form as possible<sup>25</sup>. Other states, such as Germany and especially the United Kingdom and Sweden, have gone far further. As will be shown, even today the principle that independent operators can gain access to the rail network has not been fully implemented in practice. The 1991 decision was strengthened by a 1995 package of measures that prevented excessive charges for new operators, and aimed to avoid discrimination in the allocation of train paths. However, even these measures made little progress as public service provisions, and the difficulties for new operators to gain safety certificates, prevented competition within national boundaries and also on international routes. The scene had however been set for the changes that were to come.

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however, does not agree and sees infrastructure separation as important to achieve “efficiency, transparency, neutrality and competition”.

<sup>25</sup> For a detailed comparative analysis, see A. Héritier and C. Knill “Differential Responses to European Policies” in A. Héritier et al., 2001, *op. cit.*, note 21, especially Table 8.2, p. 274



### **3 Legislative and strategic progress**

#### **3.1 An avalanche of legislation**

The European Commission was aware that the measures proposed until 1995 had not led to a de-facto opening of the railway market, and at the same time rail continued to lose ground *vis à vis* other forms of transport. The response from the Commission was a change of strategic direction, and an avalanche of new measures, a number of which are still today in the process of being decided upon<sup>26</sup>. It is fair to say that the total activity of the EU institutions concerning railway policy between 1996 and 2004 is far more considerable than all of the initiatives during the rest of the process of European integration put together. Generally speaking, the approach to liberalisation came somewhat later in railways than in other network industries and while no industry could escape the liberalisation process, the “activities at EU level were not as a result of an overall plan or a fundamental discussion paper about the economic or other advantages of liberalisation”<sup>27</sup>.

##### **3.1.1 White Paper on Transport Policy, 1996, leading to the First Railway Package, 2001**

The Commission made the choice to make its first moves in the area of rail freight, as opposed to passenger transport, for two reasons. Firstly, the greater reluctance to open passenger transport to competition, and secondly the reasonable performance of cross-border passenger traffic in comparison to the poor results for freight.

The statistics presented in the 1996 White Paper are stark. Under the heading “Why Rail is in trouble”, the figures for rail freight are extremely poor<sup>28</sup>. Between 1970 and 1994 freight traffic lost half its market share, decreasing from 283 to 220 billion tonne kilometres while the freight market expanded by nearly 70%, and road freight increased by almost

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<sup>26</sup> Agreement between Council and Parliament on the Second Railway Package was reached 16.03.2004, while the Third Railway Package was being proposed. More information at: [http://europa.eu.int/comm/transport/rail/package/next\\_en.htm](http://europa.eu.int/comm/transport/rail/package/next_en.htm), consulted 20.04.2004.

<sup>27</sup> J. Pelkmans, 2001, *op. cit.*, note 20, p. 435

<sup>28</sup> COM(96)421, White Paper, “A Strategy for revitalizing the Community’s Railways”

150%<sup>29</sup>. Although passenger market shares dropped, at least billion passenger kilometres had improved. The possible scope of rail transportation had also been in decline - between 1970 and 1998 on average 600 km of track was closed while 1200 km of new roads were built each year<sup>30</sup>.

Despite the clear message that the situation urgently needed to be improved, it took almost 5 years to get agreement on the follow-up measures from the White Paper, eventually adopted Directives 2001/12, 13 and 14 (The First Railway Package). Even then, it required considerable pressure from the European Parliament to bring forward the date of opening of the Trans-European Freight Network (Directive 2001/12) from 2008 to 2003 as originally proposed, and move forward from 2015 to 2008 the date of opening of the entire freight network to competition. The role of the European Parliament in the process of opening the network for rail freight has been very important, putting pressure on the Transport Council to move forward with market opening and overcoming the opposition led principally by France<sup>31</sup>. The Trans-European Freight Network subsequently opened to competition from 15<sup>th</sup> March 2003, meaning some preliminary lessons can be drawn from the experience so far (see Chapter 4 below).

Directive 2001/13 makes it clear that the body that allocates railway licenses should not itself provide services, while Directive 2002/14 deals with the allocation of capacity and network charging, reinforcing the principles of separation of accounts set out in Directive 91/441. The impact of these measures will also be assessed in Chapter 4 below.

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<sup>29</sup> *Ibid.*, p. 7

<sup>30</sup> White Paper Slide Presentation, September 2001, p. 18 -

[http://europa.eu.int/comm/energy\\_transport/en/lb\\_en.html](http://europa.eu.int/comm/energy_transport/en/lb_en.html), downloaded 18.04.2004.

<sup>31</sup> Interview with Brian Simpson MEP, Brussels, 17.03.2004. While the reticence of France remains a problem, the change of attitude of Germany to become more pro-competition in the mid-1990s was also of considerable importance. Please see A. Héritier and C. Knill "Differential Responses to European Policies" in A. Héritier et al., 2001, *op. cit.*, note 21, p. 272-285, and for the governmental side see H. Stevens, 2004, *op. cit.*, note 7, p. 56-59

### **3.1.2 White Paper on Transport Policy, 2001**

Almost as soon as agreement had been reached on the First Railway package, the Commission took the debate a step further by agreeing 12<sup>th</sup> September 2001 the White Paper on Transport Policy entitled "European transport policy for 2010: time to decide"<sup>32</sup>. In an eloquent and comprehensive 126-page document, the Commission documents the state of affairs of Europe's transport and proposes an array of measures to deal with the issues at stake, with the decline of the railways foremost among the these concerns.

Unsurprisingly the broad direction of the document reflects that tone of the 1996 White Paper; little had after all changed in the meantime. The document speaks of the need for a "veritable cultural revolution to make rail transport [...] one of the leading players in the transport system in the enlarged Europe"<sup>33</sup>. Foremost among the suggestions is the further opening of the market for rail freight, with the hope that competition in the market will drive the railway sector to modernise and overcome a considerable list of problems - from missing information to a lack of interoperable locomotives - which the Commission has identified.

Further, the comprehensive approach to all modes of transport outlined in the White Paper was initially warmly welcomed. Although subsequently the tone of rail operators has soured somewhat (see Chapter 7 below), the attempt to deal with all modes of transportation in a single document was a sensible one<sup>34</sup>. Foreseeing what has become a major battle, the Commission itself acknowledged:

*"we will not be able to adapt transport policy to the requirements of sustainable development unless [...] there is political determination to adopt the 60 measures put forward in the White Paper"<sup>35</sup>.*

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<sup>32</sup> COM(2001)0370, White Paper, "European Transport Policy for 2010: time to decide"

<sup>33</sup> *Ibid.*, p. 28

<sup>34</sup> Interview with Klaus Ebeling, EIA, Brussels, 09.04.2004

<sup>35</sup> White Paper Slide Presentation, *op. cit.*, note 30, p. 39

### **3.1.3 Second Railway Package, 2002**

The Commission then embarked on its next set of legislative proposals with the intention of meeting the targets of the White Paper, putting forward four measures to hasten the progress of market opening. The proposals - agreed in conciliation 16<sup>th</sup> March 2004 and voted by the European Parliament 22<sup>nd</sup> April 2004 - include measures to improve infrastructure access (amending Directive 91/440) and interoperability. The date for completion of the international rail freight market will be brought forward to 2006, and cabotage (access to national networks for internal freight by non-national operators) permitted from 2007. Further, a directive establishes common definitions concerning rail safety and a European Railway Agency is to be established<sup>36</sup>.

### **3.1.4 Third Railway Package, 2004**

Following on from the Second Package, the sense of legislative urgency from the Commission remains undimmed, with the proposals released 3<sup>rd</sup> March 2004 for the Third Railway Package. This package contains a proposal for a Directive on the certification of locomotives and train drivers for cross-border operations, a proposal for a Regulation on the quality of rail freight services, and 2 further measures in the area of passenger transport<sup>37</sup>. The last package of measures has drawn criticism from the CER, who now fear "overregulation of the sector"<sup>38</sup>, perhaps a sign that the Commission has been too keen to push ahead to far and too fast.

## **3.2 A change of strategic direction and an increasing sense of urgency**

The mid-1990s marked a major change of direction and an increased sense of urgency for the European Commission. It was clear that the railways needed a major impetus to improve and, following the Single Market logic that had pervaded all areas of European Union policy making from the mid-1980s onwards; the decision taken was to embark on a

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<sup>36</sup> Commission Press Release 22.04.2004 (IP/04/516). At the time of writing, the final texts and Directive numbers were not available. [http://europa.eu.int/comm/transport/rail/package/next\\_en.htm](http://europa.eu.int/comm/transport/rail/package/next_en.htm), consulted 28.04.2004.

<sup>37</sup> *Ibid.*

<sup>38</sup> Community of European Railways Press Release, 03.03.2004, downloaded from <http://www.cer.be/>, consulted 15.04.2004

similar route, despite considerable opposition in many quarters. The choice to focus initially on rail freight was an important one as the predicament in the sector was, and remains, more chronic than for passengers, and the nature of the market better lends itself to competition. The forthcoming chapters will analyse whether the approach taken by the Commission has indeed been the correct one, and whether rail freight has a chance to escape "last chance saloon"<sup>39</sup>.

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<sup>39</sup> Interview with Brian Simpson MEP, Brussels, 17.03.2004

## **4 Setting the targets for rail freight**

### **4.1 Legislation without direction?**

As has been shown in Chapter 3, the European Union has undertaken a large number of initiatives with the aim of stimulating rail freight, focussing most importantly on opening the market to competition. Before moving to examine whether these measures are meeting their stated aims in Chapter 5, and discussing other measures beyond market openness (Chapter 6), it is worth reflecting on where the policy for Europe's railways is heading. The European Commission has a hard job to persuade reticent governments to endorse reform in the sector, but what is the Commission actually setting out to achieve? As Jean Monnet famously said, "The common market is a process, not a product"<sup>40</sup>. It could be legitimately argued that the European Commission has lost sight of this fundamental distinction and is thus its railway policy is lacking coherence.

### **4.2 1996 White Paper: all problems, no targets**

The 1996 White Paper nails its colours to the mast in the very first paragraph: "Rail is felt not to respond to market changes or customers' needs, as other modes do"<sup>41</sup>. It goes further, stating, "A clear division of responsibilities is required between the State and the railways, particularly for public services"<sup>42</sup>. This approach is consistent with the a liberal approach to network industries, as set out by Pelkmans:

*"The fundamental idea behind liberalisation is that public policy should pursue every means to improve the incentives for network industries to perform optimally in terms of the (European) public interest"<sup>43</sup>.*

However, the main proposals for the new kind of railway that the White Paper claims it aims to achieve are, at best, minimal. As well as the recurring issue of market openness, sound finances of railway enterprises

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<sup>40</sup> Originally quoted in A. Sampson (1968) "The New Europeans". A. Jay, *The Oxford Dictionary of Political Quotations*, 2nd Edition, Oxford University Press 2001, p. 257

<sup>41</sup> COM(96)421, *op. cit.*, note 28, p. 3

<sup>42</sup> *Ibid.*

<sup>43</sup> J. Pelkmans, 2001, *op. cit.*, note 20, p. 437

and improved interoperability are the most ambitious plans contained within the document. These are tempered by some pleasant statements about how vital the railways are for societies in the European Union<sup>44</sup>.

The market-orientated rhetoric continues throughout the whole document, with statements such as "In future the railways must behave much more like normal businesses, that endeavour to satisfy their customers' requirements in the knowledge that, if they fail to do so, some one else will and they will lose the business"<sup>45</sup>. Most concretely of all: "[The railways] should be first and foremost a business"<sup>46</sup>.

Other concrete targets are hard to find. The White Paper makes plenty of valid observations about the difficulties in many areas, such as the problems of rail appealing to many sectors of industry as its traditional clients in heavy industry sectors have been declining. The idea of Rail Freight Freeways<sup>47</sup> is mooted for the first time; these proposals eventually developed into what has become the Trans European Rail Freight Network (see Chapter 5 below). Proposals are made for improvements of access rights and identification and elimination of bottlenecks on the network<sup>48</sup>.

However, the reader is left with a distinct sense of unease having examined the White Paper. The analysis of the poor situation of rail freight in Europe is stark, and while the Commission's proposals are to be welcomed, one gains the distinct impression that the overall goals are lacking for the sector. The absence of concrete targets which would enable a measure of success give the impression that either the White Paper's goals were limited, or the Commission's analysis of the likely impact of opening the market were over-estimated and that the creation of a market for rail freight was almost an end in itself. When one reads the White Paper claim: "for instance the railways should be more efficient,

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<sup>44</sup> COM(96)421, *op. cit.*, note 28, p. 3 - 5

<sup>45</sup> *Ibid.*, p. 6

<sup>46</sup> *Ibid.*, p. 10

<sup>47</sup> *Ibid.*, p. 16

<sup>48</sup> *Ibid.*, p.21-27

customer oriented, and attractive to users, but less expensive and requiring less subsidy"<sup>49</sup>, one must be sceptical.

### **4.3 2001 White Paper: time to decide some targets?**

After the ongoing saga of the adoption of the First Railway Package (see Chapter 3.1.1 above), the follow-up measures of the 1996 White Paper, it is perhaps no wonder that the European Commission became a little savvier with its 2001 White Paper<sup>50</sup>.

As previously, the White Paper is extremely strong on its criticism of the railway industry. The Commission has also managed to produce a single statistic that has raised considerable controversy within the rail industry, namely "international goods trains in Europe struggling along at an average speed of 18 km/h". Jacques Dirand of the CER rejects this statistic<sup>51</sup>, claiming that the performance of cross-border traffic can easily reach 80 km/h given the right technological innovations (see Chapter 6), a point also stressed by François Grossiord<sup>52</sup> from the Direction déléguée aux Affaires européennes of SNCF. 80km/h is somewhat optimistic in comparison to the CER Position Paper on the Commission's White Paper, which claims that "International freight trains on, for example, the important corridor connecting the four countries Belgium, Luxembourg, France and Italy average 55 km per hour"<sup>53</sup>. A further statistic from one of the new private firms operating international freight trains, Dillen Le Jeune Cargo (DLC), is illustrative. Its flagship international service - between Antwerpen in Belgium and Wackersdorf, north of Würzburg, Germany, travels at only 48,6 km/h, and DLC are proud to state this figure on their website<sup>54</sup>. While better than the 18 km/h of the Commission White Paper, this still falls far short of what road haulage could achieve over the same distance.

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<sup>49</sup> *Ibid.*, p. 6

<sup>50</sup> COM(2001)0370, *op. cit.*, note 32

<sup>51</sup> Interview with Jacques Dirand, Community of European Railways (CER), Brussels, 06.04.2004

<sup>52</sup> Interview with François Grossiord and Marie-Claude Rapp, SNCF Direction déléguée aux Affaires européennes, Brussels, 16.03.2004

<sup>53</sup> Community of European Railways (CER), *White paper on European Transport Policy, Position of the Community of European Railways*, Brussels 2001, p. 8, footnote 4.

<sup>54</sup> Statistics from the website of Dillen Le Jeune Cargo (DLC), <http://www.dlcargo.com/schedu.htm>, consulted 27.04.2004



In a section of the White Paper entitled "Fiction or prediction? Rail transport in 2010", the Commission aspires that "Average speeds for international goods trains in Europe are up to 80 km/h, four times faster than in the year 2000"<sup>55</sup>. While not a target as such, the approach in the White Paper reflects the growing impatience within the Commission, summed up by this earlier quote from Neil Kinnock:

*"In the 10 years since the Commission published its 1989 Communication which led to Directive 91/440, rail freight volumes measured in tonne kilometres have dropped by almost 20%, and the rail share of the total freight market has fallen by approximately 25%. The conclusions to be drawn from that history should be grim and plain"<sup>56</sup>.*

Secondary targets are also put in place, but these principally concern ensuring rail is competitive with other transport means and will contribute to the overall growth target. Such objectives include improvements in productivity on the railways; the ERRAC target is a trebling of manpower productivity by 2020<sup>57</sup>, while the SNCF has set itself the shorter-term goal of a 20% improvement by 2005<sup>58</sup>.

Determining the overall targets for rail freight within the White Paper is somewhat harder. On the very first page of the section of the White Paper entitled "Revitalising the railways", the aim is stated "for rail to increase its market share [...] of good traffic from 8 to 15%"<sup>59</sup>. However, this aim stems from a common strategy adopted by the International Union of Railways (UIC), Community of European Railways (CER), the International

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<sup>55</sup> COM(2001)0370, *op. cit.*, note 32, p. 34-36. These figures appear to be based on the targets of ERRAC (see references to ERRAC in note 60), one of which is an average speed of 80 km/h for freight by 2020, as quoted in European Commission, 2003, *op. cit.*, note 1, p. 19

<sup>56</sup> Speech by then Commissioner for Transport, Neil Kinnock, 7<sup>th</sup> Annual Rail Industry Conference: European Rail Freight Restructuring for the 21<sup>st</sup> Century, Brussels, 22.01.1999: <http://www.eubusiness.com/imported/1999/01/9908/>, consulted 26.04.2004.

<sup>57</sup> COM(2001)0370, *op. cit.*, note 32, p. 28. Please see the following paragraphs for the confusion of ERRAC targeting.

<sup>58</sup> 2006 Freight Plan, presented 19.10.2003 to the Administrative Council of SNCF. Translation from French: <http://fret.sncf.com/fr/quisnous/actu/2004/presse/do040328-1.asp>, consulted 28.04.2004

<sup>59</sup> COM(2001)0370, *op. cit.*, note 32, p. 27

Union of Public Transport (UITP) and the Union of European Railway Industries (UNIFE), under the umbrella of The European Rail Research Advisory Council (ERRAC). ERRAC is an "...advisory body to the EU. [...] Its primary mission is to establish and carry forward a Strategic Rail Research Agenda that will influence all stakeholders in the planning of research programmes, particularly national and EU programmes"<sup>60</sup>. Despite its EU-sponsored nature, ERRAC is itself not mentioned by name in the White Paper, and further the Commission says it welcomes the initiative of the 4 organisations that committed to the ERRAC target. This target the Commission had itself undoubtedly pushed for, if not directly through ERRAC, then at least through the creation of the body and the Commission's support for it. On the other hand, Jan Scherp of Directorate-General Energy and Transport distanced the European Commission totally from these targets when questioned about the matter<sup>61</sup>. It therefore remains unclear whether the prominent appearance of the ERRAC targets in the White Paper is as a result of the Commission wishing to give the targets prominence but do this by the back door, or whether ERRAC should be seen as a genuine effort to get the railway sector to take its own matters in hand.

Scherp's vision for rail was considerably more limited, restricting himself to the targets implicit within the White Paper but not concretely stated, that being the aim is to maintain 1998 levels of modal balance in freight transport<sup>62</sup>. When this is put together with the calculation that freight transport is projected to grow 38%<sup>63</sup>, so rail freight tonnes per kilometre should also grow by 38%<sup>64</sup>. Even these more limited targets must be set in the context of a drop in tonne kilometres from 2002 to 2003 of 1% across the EU as a whole<sup>65</sup>, although cross-border trade among the new EU member states grew by 12%<sup>66</sup>.

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<sup>60</sup> 'About ERRAC', <http://www.errac.org/about.htm>, consulted 28.04.2004

<sup>61</sup> Interview with Jan Scherp, European Commission Directorate-General Energy and Transport, Brussels, 06.04.2004.

<sup>62</sup> *Ibid.*

<sup>63</sup> COM(2001)0370, *op. cit.*, note 32, p. 15

<sup>64</sup> *Ibid.*, p. 113

<sup>65</sup> UIC statistics quoted in *International Freightling Weekly* (Issue 1779, 23.02.2004), "'Loosen up' call to rail operators", p.1. France experienced the most serious reduction in mainland Europe, although this

It is worth making a small reference to the state of affairs in the USA. Often ridiculed in Europe for the state of its state-run passenger operator, Amtrak, rail freight in Europe has much to learn from the United States experience, where 40% of freight is transported by rail<sup>67</sup>. Due to the importance of passenger transport on European networks, geographic constraints on network improvements, and the European importance of short-sea shipping, it is questionable whether Europe could ever reach the American level. However, if the Finnish and Swedish experiences, with 25% and 33% of tonne kilometres respectively (see Annex I below) were to be replicated across Europe, 40% would be considerably closer than it is today.

Despite these ambiguities, there is a gradual appreciation of the need to set ambitious targets within the sector, for cross-border transport as well as internally, and look for ways to maximise the potential for rail freight. The industry, most notably through the CER, has committed itself seriously to rejuvenating the sector, and in the absence of a clear direction from the Commission has been one of the supporters of the ERRAC targets.

#### **4.4 Targeting: the national level**

Europe-wide targets cannot be seen totally in exclusion from national targets. Of particular note is the situation in the United Kingdom that has committed itself to an 80% increase in rail freight 2000-2010<sup>68</sup>, albeit from a very low starting point according to Brian Simpson MEP<sup>69</sup>. Simpson however is convinced that in rail freight the positive UK example should be borne in mind for the rest of Europe. Initial experience shows that the UK is making good progress to meet its targets: freight increased from 13 billion tonne kilometres 1994-95 to 19,5 billion tonne kilometres by 2001-

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can be interpreted as being due to ongoing industrial action, rather than the market and technical factors outlined in Chapters 5 & 6 below.

<sup>66</sup> *Ibid.*, Community of European Railways (CER) figures in the article.

<sup>67</sup> COM(2001)0370, *op. cit.*, note 32, p. 27

<sup>68</sup> Summary of Transport 10 Year Plan: 2000,

[http://www.dft.gov.uk/stellent/groups/dft\\_transstrat/documents/page/dft\\_transstrat\\_503946.hcsp](http://www.dft.gov.uk/stellent/groups/dft_transstrat/documents/page/dft_transstrat_503946.hcsp), consulted 26.04.2004.

<sup>69</sup> Interview with Brian Simpson MEP, Brussels, 17.03.2004

02, despite the complications on the network as a result of the Hatfield disaster<sup>70</sup>.

SNCF Fret has also set itself ambitious targets: that by 2010 75% of its traffic should be international freight, and that its market share should increase beyond its current 20,5% of the French freight market. Currently, 50% of SNCF freight traffic is international although 15% is from France's ports<sup>71</sup>. A national target is harder to determine for Railion, the successor to DB-Cargo in Germany. Claiming to be "die erste europäische Güterbahn" (the first European freight railway)<sup>72</sup>, Railion's strategy is to use its dominant market position in Germany in order to expand elsewhere - an alternative approach to SNCF, and one that will be examined further in Chapter 5<sup>73</sup>.

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<sup>70</sup> Progress report on 10-year transport plan: [http://www.dft.gov.uk/stellent/groups/dft\\_transstrat/documents/graphic/dft\\_transstrat\\_023008-20.jpg](http://www.dft.gov.uk/stellent/groups/dft_transstrat/documents/graphic/dft_transstrat_023008-20.jpg), consulted 26.04.2004.

<sup>71</sup> Strategy and statistics of SNCF Fret: <http://fret.sncf.com/fr/quisnous/profil/strategi.asp> and <http://fret.sncf.com/fr/quisnous/profil/reperes.asp>, both consulted 28.04.2004

<sup>72</sup> Railion slogan, from <http://www.railion.com/>, consulted 28.04.2004

<sup>73</sup> For step-by-step coverage of the expansion of Railion, news articles are collected at the website: <http://www.eriksrailnews.com/>, consulted at many intervals between 01.2004 and 04.2004. For the Railion archive, search for "railion cargonet" in the search function.

## 5 Liberalisation and competition

### 5.1 Railways: not a network industry like any other

If we now take as given the need to introduce competition into rail freight in Europe (see Chapter 4.1 above), the natural question that arises is how can this best be accomplished? As a starting point, it is worth reflecting on matters in another network industry, for example electricity. Multiple providers of electricity compete with each other in different locations and using different means of production, but producing the same product. Competition between different producers can take place. Transmission of the electricity is a very different matter; building a second national grid would be prohibitively expensive, so this part of the industry must remain a natural monopoly. The sale of electricity to households can also be competitive, with firms competing for customers. The parallel for railways would be the network remaining a monopoly (creating a second set of rails would be out of the question), but with competition over service provision for the transportation of goods and passengers.

It is here that the parallel stops. Unlike electricity, the 'product' that is purchased - the ability to get goods or passengers from A to B - is not homogeneous<sup>74</sup>. The network requirements for a heavy goods train - in terms of maximum speed of the lines and means to load and un-load - are very different from the requirements of a high-speed passenger train. Matters are complicated by public service obligations; routes that are not profitable are kept open for social reasons<sup>75</sup>. Further, the railways are open to a wide array of substitutes, many of which have different taxation regimes that may lead to market distortions<sup>76</sup> (see Chapter 7). Far from being the start of competition, the railways have met with fierce

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<sup>74</sup> W. Bradshaw, "Competition in the Rail Industry" in *Oxford Review of Economic Policy*, Vol. 13 No. 1 pp. 93-103, Oxford University Press and The Oxford Review of Economic Policy Limited, Oxford 1997, p. 93

<sup>75</sup> The issue of 'cherry picking' especially concerns the CER where rail cuts back to its profitable services, but overall market share for the rail sector is lost. A detailed discussion of this matter is beyond the scope of this paper; it suffices to say that distinguishing a profitable from a non-profitable service is not a straightforward task in the railway sector. Information from interview with Jacques Dirand, Community of European Railways (CER), Brussels, 06.04.2004

<sup>76</sup> W. Bradshaw, 1997, *op. cit.*, note 74, p. 93

competition from other means of transport and have been losing market share of freight to road haulage since the 1920s<sup>77</sup>.

The issue that the European Union and its member states have had to grapple with is whether this external pressure on the railways from other means of transport (*intermodal* competition) has been sufficient to give the impetus required to improve market share. The continued observation of the opposite trend since the 1960s onwards led to the conclusion that *intramodal* competition within the railway sector was vital, especially with regard to international freight. This matter is demonstrated when one looks at Europe's two rail heavyweights: France and Germany. SNCF Fret and DB Cargo / Railion each have approximately 20% of their national freight markets, but rail comprises only 11% of Franco-German freight flows<sup>78</sup>.

With this goal in mind, a model for the structure of the industry must be developed. With the requirement of Directive 91/440/EEC that separate accounts for infrastructure and services be kept, the European Commission took the first step towards the full separation of infrastructure and services, a decision that at the time only had limited precedent in Switzerland and Sweden<sup>79</sup>. The idea was that the highly indebted national railway companies could load the debt onto the network provider, with the service providers free to compete in the market, albeit as powerful incumbents.

The idea of separation initially met with considerable opposition. Ed Burkhardt, President of Wisconsin Central, eventual owners of EWS, Britain's main rail freight firm, said:

*"Open access is made possible by the railway industry structure in the UK, which sees infrastructure separated from operations - a structure devised by government theorists*

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<sup>77</sup> P. Bauchet, 1996, *op. cit.*, note 9, p. 18-19

<sup>78</sup> Interview with François Grossiord and Marie-Claude Rapp, SNCF Direction déléguée aux Affaires européennes, Brussels, 16.03.2004. The SNCF internal market share was 20,5% in 2002 - <http://fret.sncf.com/fr/quisnous/profil/reperes.asp>, consulted 28.04.2004.

<sup>79</sup> T. Kiriazidis, 1994, *op. cit.*, note 3, p. 35

*keen on competition, who seem to have missed the fact that railways have only 6 per cent of the market and trucks have all the rest. In my view separation of infrastructure from operations is a poor idea, which only drives up costs. I've never appreciated an integrated railway so much as by having to deal with one that isn't*<sup>80</sup>.

Kiriazidis is also highly critical, claiming, "an integrated system is necessary to achieve a cost-effective railway to compete with other modes of transport", and stating that services can be improved by either infrastructure or rolling stock improvements<sup>81</sup>. His solution is the development of a European rail management system that would force national networks to improve access across borders<sup>82</sup>. Such a response would arguably be disproportionate for the European Union, and he fails to suggest who would operate such services. The problem is precisely that large national rail operators were unwilling to cross borders. Further, the important role of regulators can play in network industries seem to have been ignored.

Burkhardt's criticism is, at face value, more valid. However, two matters must be borne in mind. Firstly, Burkhardt's background is in the United States where rail freight dwarfs passenger transport on the railways must be considered<sup>83</sup>. In Europe, rail usage is very much mixed between passengers and freight, often with the former predominant, especially when it comes to allocation of network capacity<sup>84</sup> (see Chapter 5.2.4 below). Secondly, without the separation of infrastructure and services there would have been no way to make railway reform palatable to European electorates - regional private sector monopolies would not be tolerated.

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<sup>80</sup> *Modern Railways* (01.1997), quoted in W. Bradshaw, 1997, *op. cit.*, note 74, p. 96

<sup>81</sup> T. Kiriazidis, 1994, *op. cit.*, note 3, p. 36

<sup>82</sup> T. Kiriazidis, 1994, *op. cit.*, note 3, p. 49

<sup>83</sup> 2.140 billion tonne kilometres were transported by rail in the USA in 2000, almost 10 times as much as the 250 billion tonne kilometres in the EU-15. The opposite is the case for passengers, with 304 billion passenger kilometres in the EU-15, as opposed to 24 billion passenger kilometres in the USA.

Source: European Commission, *Handbook of Transport Figures*, 2003 Edition, Office for Official Publications of the European Communities 2003, Table 3.1.12, p. 17

<sup>84</sup> COM(2001)0370, *op. cit.*, note 32, p. 33

While the separation option met with opposition initially, the valid question was raised about what possible alternatives would be available. The UK government pondered this issue in the early 1990s, deciding that a private sector monopoly would be inappropriate and would not prove to be a great improvement over a state monopoly when it came to innovation, which had been seriously lacking under British Rail. The other serious proposition was to divide the network into regional parts - undesirable due to long distance freight and passenger services. The decision was hence taken in favour of separation, although the decision to put a private company (Railtrack) in charge of the infrastructure has since proven to be a poor decision<sup>85</sup>.

The lack of an alternative option meant that opposition to the Commission's approach has gradually lessened over time. The CER, having initially opposed the idea and having defended integrated national operators, has subsequently softened its attitude, although its vocabulary is more cautious than that of the European Commission when it comes to the matter of separation<sup>86</sup>.

The growing acceptance of the notion of separation led to the creation in December 2001 of the European Rail Infrastructure Managers Association (EIM) to defend the interests of separated infrastructure companies to the EU institutions<sup>87</sup>. However, not all countries have opted for totally separate entities to control their infrastructure; DB Netz for example still remains part of the Deutsche Bahn group but has a list of its network prices available for download on its website<sup>88</sup>. The experience in the new member states is similar; complete separation has taken place in Slovakia (and also in Romania), an infrastructure agency guarantees access in the Czech Republic and Lithuania while holding structures have been

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<sup>85</sup> W. Bradshaw, 1997, *op. cit.*, note 74, p. 96. Railtrack has subsequently been renationalised and is now Network Rail. See <http://www.networkrail.org.uk/>, consulted 25.04.2004

<sup>86</sup> See T. Kiriazidis, 1994, *op. cit.*, note 3, p. 37 for CER opposition, and Press information sheet: Rail Freight Liberalisation: the process goes on, 11.03.2004, courtesy of J. Dirand, CER

<sup>87</sup> <http://www.eimrail.org/>, consulted 10.03.2004

<sup>88</sup> [http://www.bahn.de/konzern/netz/produkte/die\\_bahn\\_trassen\\_2001\\_preise\\_2003.shtml](http://www.bahn.de/konzern/netz/produkte/die_bahn_trassen_2001_preise_2003.shtml), consulted 29.04.2004. Also of note: not all EU countries are hence represented in EIM.



established in Poland and Hungary to allow fair access to the networks of incumbents PKP and MAV<sup>89</sup>.

## **5.2 Network Access**

Once the principle of separation of accounts has taken place, and a system put in place in legislation, the issue of access to the network must be dealt with. This encompasses four different elements - licensing, safety certification, charging, and capacity allocation. Each of these becomes more complex when applied for freight crossing national frontiers.

### **5.2.1 Operator Licensing**

The first step for any new company wishing to run international rail freight services is to be granted a freight operator's license by the member states in which it intends to operate services. This first hurdle has been fraught with difficulties, despite the adoption of Directive 2001/12/EC, which takes further the principle of open granting of licenses set out in Directive 95/18/EC. The adoption of the First Railway Package, of which 2001/12/EC is a part was problematic enough (see Chapter 3.1.1 above), requiring pressure from the European Parliament to push for the opening of the Trans European Rail Freight network by 15<sup>th</sup> March 2003. The European Commission is sufficiently concerned so as to take legal action over the matter:

*"Nevertheless, 7 member states currently have to defend themselves in the European Court of Justice for not having - or at least for not having completely - transposed the Directives of the Rail Infrastructure Package"<sup>90</sup>.*

Experience on the ground has in the most concrete terms reflected the Commission's fears. France, although not among the countries to be named in the case, is the recipient of the toughest criticism. While Marie-Claude Rapp was happy to trumpet the granting of the first rail freight operator's licence to a Eurotunnel subsidiary company on 13<sup>th</sup> February

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<sup>89</sup> H. Groot, *Integration of accession countries in the EU: the case for railways*, European Commission Directorate-General Energy & Transport Railway Articles 2003, p. 8

<sup>90</sup> Speech by European Commissioner responsible for Transport, Loyola de Palacio, p. 3, EIM/ERFA/UIRR Conference "Rail Freight Liberalisation: One Year On", 17.03.2004, downloaded from <http://www.tostaky.be/railconference2004/>, 29.04.2004

2004<sup>91</sup>, claiming that SNCF is embracing the principles of the Commission's programme, others are not so generous. Brian Simpson lays the blame for the entire lack of progress on France, with support of the Benelux countries, underlining the importance of France as a transit country<sup>92</sup>. In a small section of the SNCF Fret website, the French operator is open about its concern about liberalisation, stating that network access certification is only granted once SNCF has presented the technical case to the French government about the suitability of the new firm<sup>93</sup>. Intermodal firm Bertschi AG, whose containers are transported by SNCF, further criticises that the French network is further burdened by "strikes, huge delays"<sup>94</sup>.

Germany ranks number one for network access in Europe, followed by Netherlands, Switzerland<sup>95</sup>, Denmark, Sweden, Great Britain and Italy, according to a 2002 IBM / Kirchner study, conducted for Deutsche Bahn<sup>96</sup>. Only in these countries among the EU-15 and Norway and Switzerland is network access deemed sufficient. While private operations have traditionally existed alongside Deutsche Bahn in Germany and SBB in Switzerland<sup>97</sup>, competition in the other cases has resulted principally from

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<sup>91</sup> Interview with François Grossiord and Marie-Claude Rapp, SNCF Direction déléguée aux Affaires européennes, Brussels, 16.03.2004. Details of European rail freight operator's license from the Media Centre at <http://www.eurotunnel.com/> - press release dated 13.02.2004, consulted 29.04.2004

<sup>92</sup> Interview with Brian Simpson MEP, Brussels, 17.03.2004. Luxembourg is heavily criticised by the European Commission, having by 16.10.2003 not having confirmed transposition of 2 of the 3 Directives of the First Railway package. See [http://europa.eu.int/comm/transport/rail/overview/infrastructure\\_implementation\\_en.htm](http://europa.eu.int/comm/transport/rail/overview/infrastructure_implementation_en.htm), consulted 29.04.2004

<sup>93</sup> "Ce certificat est délivré par le ministère des Transports après avis émis par Réseau Ferré de France (RFF) sur la base d'un rapport technique établi par la SNCF", translation in text by the author. <http://fret.sncf.com/fr/quisnous/profil/strategi.asp>, consulted 30.04.2004

<sup>94</sup> Quote from powerpoint presentation, to describe the French rail freight network, by Hans Jörg Bertschi, Bertschi AG, at the EIM/ERFA/UIRR Conference "Rail Freight Liberalisation: One Year On", 17.03.2004, downloaded from <http://www.tostaky.be/railconference2004/>, 29.04.2004

<sup>95</sup> The case of Switzerland cannot be ignored because, though it is not a EU member state, the Gotthard-Lötschberg is a main North-South freight corridor between EU states. Further, Swiss rail freight policies have for a long time allowed competition with the incumbent SBB, from firms such as BLS Cargo AG - see <http://www.bls.ch/>, consulted 29.04.2004

<sup>96</sup> C. Kirchner and IBM Business Consulting, *Summary of the Study Rail Liberalisation Index*, Brussels 2002p. 9-10. Despite being commissioned by Deutsche Bahn, the report does not only commend market access in Germany.

<sup>97</sup> For example Hafen und Güterverkehr Köln AG (HGK) has operated its own lines and operated over German lines since before the start of the EU liberalisation process - see 'Wir über uns' at <http://www.hgk.de/>, consulted 29.04.2004

initiatives from the late-1980s onwards<sup>98</sup>. Further, the network access in these countries has enabled the development of Railion, the first major transnational freight operator. It is no coincidence that it is presently operating in Denmark and Netherlands as well as its base in Germany<sup>99</sup>, and is looking to acquire former Swedish state freight operator Green Cargo<sup>100</sup>. As yet it has not managed to penetrate into France, instead looking to launch joint infrastructure initiatives with SNCF (see Chapter 6 below).

The different approach from state to state is summarised by Rail4Chem Eisenbahnverkehrsgesellschaft mbH (Rail4Chem), a German private freight operator that has aimed for Europe-wide expansion in the transport of chemicals by rail: "Did the rail operators get the open access to rail infrastructure which they need and to which they have the right? Is this guaranteed in all member states? Definitely: NO"<sup>101</sup>.

### **5.2.2 Safety Certification**

Once an operator's licence has been granted, in certain circumstances an additional safety certificate is required. The different means of allocation of certificates in different countries has frustrated Rail4Chem, which has aimed for Europe-wide expansion. Licenses are allocated on a path-by-path basis in France and Switzerland, while in Germany no separate safety licence is needed. On the other hand, foreign companies are presently not allowed certificates in Poland, and the means to achieve such a certificate in Belgium is still unknown<sup>102</sup>. Dillen Le Jeune Cargo (DLC) faced an additional problem in Belgium as the Belgian Government granted a safety licence in April 2002, 18 months after the granting of the operator licence<sup>103</sup>. According to the CER<sup>104</sup>, DLC remains the only freight operator

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<sup>98</sup> T. Kiriazidis, 1994, *op. cit.*, note 3, p. 35

<sup>99</sup> Railion Website: <http://www.railion.de/deutsch/netzwerk/europa.html>, consulted 29.04.2004

<sup>100</sup> *Dagens Nyheter* (22.04.2004), "Regeringen öppnar för försäljning av Green Cargo", <http://www.dn.se/DNet/road/Classic/article/0/jsp/print.jsp?&a=257538>, consulted 29.04.2004

<sup>101</sup> Powerpoint presentation by Matthias Raith, Rail4Chem, at the EIM/ERFA/UIRR Conference "Rail Freight Liberalisation: One Year On", 17.03.2004, downloaded from <http://www.tostaky.be/railconference2004/>, 29.04.2004

<sup>102</sup> *Ibid.*

<sup>103</sup> Powerpoint presentation by Jeroen le Jeune, DLC Cargo, at the EIM/ERFA/UIRR Conference "Rail Freight Liberalisation: One Year On", 17.03.2004, downloaded from <http://www.tostaky.be/railconference2004/>, 29.04.2004

alongside the state-run SNCB in Belgium, the bureaucratic difficulties for new operators challenging the incumbent being the main problem.

As well as the matter of certification, managing to adhere to sometimes conflicting safety regulations in cross-border freight has also proven to be a headache for the European Commission (see Chapter 6.1 below). Means of training train drivers to a sufficiently high standard will also potentially cause problems in the future as argument will ensue over meeting the costs of this training and certification; the claim if cherry-picking will surely return<sup>105</sup>. The matter of safety, of course one of rails main selling points *vis à vis* road haulage, however proves to add yet more difficulties to an already complex picture.

### **5.2.3 Charging**

Once an operator has been granted the necessary licenses and certification, the network charges incurred to operate the service must be calculated. Two principal problems arise, both of them common to the problems raised in many others of this paper: the power of the incumbent operator, and a difference of national standards. Le Jeune calls for “more investigation by the European Commission into state aid towards the national railroads”<sup>106</sup>. For a round trip from Rotterdam to Southern Poland, Matthias Raith from Rail4Chem claims that a private operator pays more than twice as much in network charges as an incumbent operator<sup>107</sup>. The problem is also raised that the means of charging is different; for instance in France a charge is levied for access to a route, with an additional kilometre charge per train, while in Germany only the charge per kilometre charge exists<sup>108</sup>. These differences therefore make budgeting for cross-border freight extremely complex, acting as a real barrier to market entry.

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<sup>104</sup> Press information sheet: Rail Freight Liberalisation: the process goes on, 11.03.2004, courtesy of J. Dirand, CER

<sup>105</sup> Training of drivers raised in O. Silla, *Creating the internal rail freight market*, European Commission Directorate General Energy & Transport Railway Articles 2003, p. 3

<sup>106</sup> Powerpoint presentation by Jeroen le Jeune, *op. cit.*, note 103

<sup>107</sup> Powerpoint presentation by Matthias Raith, *op. cit.*, note 101

<sup>108</sup> *Ibid.*, and [http://www.bahn.de/konzern/netz/produkte/die\\_bahn\\_trassen\\_2001\\_preise\\_2003.shtml](http://www.bahn.de/konzern/netz/produkte/die_bahn_trassen_2001_preise_2003.shtml), consulted 29.04.2004

#### **5.2.4 Capacity Allocation**

The fourth barrier to be overcome is capacity allocation, a problem that afflicts rail freight in general, not just when it comes to new operators. According to the 2001 White Paper, "Priority is given to passenger trains, with the result that goods consignors have lost confidence in the railways"<sup>109</sup>. As the quantity of passenger and freight traffic has gradually grown over the past decades, focussing more and more on transportation to and from major conurbations, so the number of bottlenecks has grown on the network, almost always to the detriment of freight<sup>110</sup>. For a detailed analysis of capacity problems caused by saturated networks, please see Chapter 6.3.1 below.

Directive 2001/14 of the first railway package deals with the matter of non-discriminatory allocation of capacity, preventing the practice of allocating non-dominant operators to impractical routes and timetables, and the fear of new operators that "their requests are being 'filtered' by an integrated operator whose motivation may be questioned"<sup>111</sup>. Conflicts however endure with regard to the interpretation of public service provisions for passenger services and how freight capacity should be allocated as a result.

### **5.3 Analysis of Progress**

"Progress towards a Single European Market and a better performance of rail freight services has been achieved one year after market opening. But this progress is still limited"<sup>112</sup>. This is how Loyola de Palacio today views the rail freight market. The fact that the Commissioner is willing, to a limited degree, to complement the sector is positive, and is a genuine expression of the progress that has been made. The vocabulary used certainly quite different to the 2001 White Paper.

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<sup>109</sup> COM(2001)0370, *op. cit.*, note 32, p. 33

<sup>110</sup> Community of European Railways (CER), *Towards Better Performance of European Rail Freight, Diagnosis and Action Plans of CER Corridors 2-3-5*, Brussels 2002, p. 16-18

<sup>111</sup> Speech by James Evans, Secretary General of the European Rail Infrastructure Managers (EIM), 25.09.2002, *op. cit.*, note 24

<sup>112</sup> Speech by European Commissioner responsible for Transport, Loyola de Palacio, p. 9, EIM/ERFA/UIRR Conference "Rail Freight Liberalisation: One Year On", 17.03.2004, downloaded from <http://www.tostaky.be/railconference2004/>, 29.04.2004

The reality has however been quite different to the direction of liberalisation that the European Commission set out in the 2001 White Paper. Rail4Chem and IKEA Rail were cited as examples of the rail market of the future, the challengers to the large national incumbents<sup>113</sup>. IKEA Rail has since been liquidated, and had previously only run one route<sup>114</sup>. While Rail4Chem is faring better, with 10-15% year on year expansion, it remains a small undertaking, transporting some 1.4 billion tonne kilometres in 2003<sup>115</sup>, totally a 2.5 % of rail freight in Germany<sup>116</sup>. Despite this, there may be some truth in the claim that these operators, offering innovative, sectoral, consumer-orientated approaches, acted as a breath of air in the rail freight market, pushing incumbent firms to improve their performance.

To put this in context, it is possible to look at the relative size of operators in Germany. Rail4Chem has access to only 16 mainline locomotives, of which 7 are internationally operable<sup>117</sup>. Hafen und Güterverkehr Köln AG (HGK), which saw its freight increase 44% in 2003, has access to only 39 locomotives, while Bahn- und Hafenbetriebe der Ruhrkohle AG GmbH (RAG) has 73 locomotives. However, both HGK and RAG operate their own track - 109 and 346km respectively - as well as using the main German network, so are not purely direct competitors of Railion<sup>118</sup>. Dwarfing the small operators, Railion had access to 1141 main line freight locomotives<sup>119</sup> and transported 78 billion tonne kilometres in 2002<sup>120</sup>. This led Palacio to state that "no new entrant apparently dares to challenge the incumbent railway undertaking"<sup>121</sup> - probably not unsurprising given the

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<sup>113</sup> COM(2001)0370, *op. cit.*, note 32, p. 28

<sup>114</sup> Information from <http://www.eriksrailnews.com/>, search 'ikea', consulted 30.04.2004. IKEA has continued to use rail between Duisburg, Germany and Älmhult, Sweden, operated by Bahn- und Hafenbetriebe der Ruhrkohle AG GmbH (RAG). EWS, the UK rail freight operator, has also just signed a contract to transport IKEA goods within the UK by rail - see EWS Press Release 11.02.2004 <http://www.ews-railway.co.uk/pages/displaynews.php3?storyid=322>, consulted 30.04.2004

<sup>115</sup> <http://www.rail4chem.com/>, consulted 30.04.2004

<sup>116</sup> Powerpoint presentation by Matthias Raith, Rail4Chem, *op. cit.*, note 101

<sup>117</sup> <http://www.rail4chem.com/index.php?id=6>, consulted 30.04.2004

<sup>118</sup> European Railway Stock List, <http://mercurio.iet.unipi.it/list/germany.html>, consulted 22.04.2004

<sup>119</sup> <http://www.railion.com/deutsch/netzwerk/unserEquipment/streckenloks.html>, figures for 30.06.2003, website consulted 24.04.2004

<sup>120</sup> European Railway Stock List, <http://mercurio.iet.unipi.it/list/germany.html>, consulted 22.04.2004

<sup>121</sup> Speech by European Commissioner responsible for Transport, Loyola de Palacio, *op. cit.*, note 112, p. 3

level of investment required to start a rail enterprise, even if the barriers outlined above can be overcome.

Competition is, however, developing along other lines: through a range of strategic alliances and mergers between traditional rail enterprises and smaller firms, building on historic competition along north-south routes. Jacques Dirand repeatedly stressed the importance of routes such as Rotterdam - Milano, where competition had for some decades been fierce between SNCF and DB for trains to be routed via Lyon - Torino or Mannheim - Basel en route to northern Italy, or between SBB and SNCF for UK - Italy flows. These processes - termed "strategic route management" by CER - will remain important<sup>122</sup>.

In addition to this direct competition between major operators, competition is proceeding faster since the introduction of the First Railway Package thanks to a series of alliances within the sector. Of most interest is the approach for traffic between Germany and Switzerland, where Railion has entered into partnership with BLS in Switzerland, while the Swiss traditional operator SBB has launched a co-operation with HGK in Germany. This allows Railion-hauled trains deep into Switzerland and BLS and SBB hauled trains as far as Köln. SBB is pursuing a similar approach in Italy with its Swiss Rail Cargo Italy subsidiary, while Italian traditional operator Trenitalia S.p.A. is cooperating with small German operator TX Logistik AG and Austrian operator LTE<sup>123</sup>. Launching such strategic alliances allow traditional operators from other states to gain a foothold in new markets. Once more in this matter, France proves to be problematic - due to the enduring dominance of SNCF, it has been impossible to launch such alliances. It is perhaps no surprise that the first firm to set-up in the French market is Eurotunnel - it already has a small foothold on French soil<sup>124</sup>.

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<sup>122</sup> Press information sheet: Rail Freight Liberalisation: the process goes on, 11.03.2004, courtesy of J. Dirand, CER, p. 2

<sup>123</sup> Details of alliances from Press information sheet: Rail Freight Liberalisation: the process goes on, 11.03.2004, courtesy of J. Dirand, CER, p. 4, and <http://www.railion.de/deutsch/netzwerk/europa.html>, consulted 29.04.2004

<sup>124</sup> Interview with Jacques Dirand, Community of European Railways (CER), Brussels, 06.04.2004

With little more than one year of experience of the Trans-European Rail Freight Network, and the time required for the investment intensive railway sector to adjust, it is hard to assess whether liberalisation and market opening are having the desired impact with a view towards meeting the targets set out in Chapter 4. Further, the difficulties caused in 2003 by repeated industrial action in France, and the enduring period of slow economic growth in the European Union means it is too early to concretely say whether progress is being made. The guarded comments of Palacio, together with statements from Simpson who is "more optimistic than a few years ago", and Ebeling who feels that even the ERRAC targets might be achievable, seem to indicate that the industry is on the way up from rock bottom<sup>125</sup>.

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<sup>125</sup> Interviews with Brian Simpson MEP, Brussels, 17.03.2004 and Klaus Ebeling, EIA, Brussels, 09.04.2004



## **6 Interoperability and network improvements**

### **6.1 Overcoming national differences**

While attempts to open the market for rail freight play a major role in changing the sector, such moves are of little sense unless the other major inherent problem of railways is removed or at least alleviated: a lack of interoperability of railways in Europe. As has been alluded to in Chapter 2, every national system has developed separately from a time long before the European Union was even a dream in Altiero Spinelli's mind<sup>126</sup>. The challenge for the European Commission, working together with national governments and the railway industry, is to find means to overcome these problems in the most efficient manner. The scale of the challenge is summarised thus: "Road transit dominates the transportation system, while air transport is the fastest growing sector - significantly, neither one of these modes is particularly hindered by interoperability problems"<sup>127</sup>.

### **6.2 Achieving Interoperability**

#### **6.2.1 Locomotives and loads**

The biggest challenge for Europe's railways is the existence of 5 different systems of current supply (see Annex II), while particular difficulties when it comes to transportation of freight are differences in track alignment and the maximum sizes of wagons permitted in different member states, and incompatibilities of the documentation that must be carried with a freight train<sup>128</sup>. Where international freight services do run, problems are often encountered at the border where locomotives have to be changed in order to for the train to run in the neighbouring country. As a result, freight can be forced to wait many hours at the border, contributing to the low average speed of international freight traffic and to the poor level of reliability of international freight trains, where "...in 2003, more than 40%

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<sup>126</sup> Spinelli developed his ideas of a federal European Union in the mid-1940s, please see <http://www.jef-europe.net/federalism/archives/000936.html>, consulted 02.04.2004

<sup>127</sup> European Commission, 2003, *op. cit.*, note 1, p. 7

<sup>128</sup> The size of wagons is especially severe for the UK, which has lower maximum sizes than the rest of Europe - the main reason for limited rail freight through the Channel Tunnel. The matter is also significant for Alpine transport - see Chapter 6.3.3 below. Information from H. Stevens, 2004, *op. cit.*, note 7, p. 88-102

of all international trains of combined transport are delayed by more than 30 minutes<sup>129</sup>.

The rail freight link between Woippy, a major freight yard close to Metz in France and Mannheim in Germany, demonstrates the scale of the problem of cross-border freight and also offers considerable hope for how improvements could proceed in the future<sup>130</sup>. Prior to improvements conducted from 2002 onwards, only 11% of Franco-German freight was by rail, while trains transport some 20% of national freight in both countries. As a result of the different electricity supply systems in France and Germany, the need to change the train driver at the border, and differences of documentation required on both sides of the frontier, in early 2002 it took as much as 6 hours to make the 223km journey from Woippy to Mannheim. The average speed was 37 km/h, far below what a truck would achieve, and 8 trains made the journey in each direction each day. With the introduction of interoperable locomotives in 2003, it was only necessary to change driver at the border, and today even this has been abolished as a system of mutual recognition of drivers' qualifications has been established (see Chapter below). The result has been a reduction of the journey time to slightly more than 3 hours, with 60 trains each day in each direction. In the future, the system will be extended to allow trains with one driver and one locomotive to make the journey all the way from Köln to Lyon.

Although the initiative of Railion and SNCF on the Woippy - Mannheim route is not the only example of interoperable, high speed, cross border freight<sup>131</sup>, it is more the exception than the rule at the present time. More generally, improvements in the level of investment in multi-system

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<sup>129</sup> Speech by European Commissioner responsible for Transport, Loyola de Palacio, *op. cit.*, note 112, p. 6

<sup>130</sup> Data for Woippy-Mannheim improvements from interview with François Grossiord and Marie-Claude Rapp, SNCF Direction déléguée aux Affaires européennes, Brussels, 16.03.2004, and "Woippy-Mannheim: le fret sans frontières", <http://www.trains-en-voyage.com/actualite/woippy-mannheim.htm>, consulted 03.05.2004

<sup>131</sup> Other examples include direct freight from the Czech Republic to Dresden, from Belgium to France (Alsace-Lorraine), via Luxembourg, and routes through the Alps such as Gotthard-Lötschberg and the Brenner Pass, although Woippy - Mannheim has seen an unparalleled intensity of investment and improvement. See [http://www.bahn-net.de/presse/themendienst/holding/th\\_eu\\_osterweiterung.htm](http://www.bahn-net.de/presse/themendienst/holding/th_eu_osterweiterung.htm), consulted 01.05.2004, and Community of European Railways, 2002, *op. cit.*, note 110

locomotives, many of them for dedicated freight use, by the majority of Europe's railway companies will further improve the technical possibilities of running cross-border freight. As would be expected, Railion is the European leader in this regard, having placed an order for 400 locomotives of the Class 189 that can operate on four different electrical systems<sup>132</sup>. It will take at least until the end of the decade for interoperable locomotives to be available for all cross border freight where these could be required.

Similar problems are encountered when it comes to wagons transporting the freight. The maximum wagon axle load varies from country to country and is especially a concern for transport from certain new member states where axle loads are higher than within the EU-15. Although upgrade programmes are being conducted, the maximum length of freight trains permitted ranges from 400m in Spain and 500m in parts of Italy, up to 750m in France, with Switzerland planning 1.5km running. Train length is relevant as passing loops are required to enable faster passenger trains to pass the slower-moving freight trains<sup>133</sup>.

### **6.2.2 Train Drivers**

Not only must interoperability be ensured for the locomotives and the wagons being moved; the staff operating the locomotives must also be able to move across borders. In terms of the time lost, changing driver at a border is a lot more swift than needing to change a locomotive, but labour productivity has long been criticised in the railway industry, so interoperable drivers is one additional way to improve efficiency. Unlike international air transport, there is of course no *lingua franca* for the railway industry<sup>134</sup>; it is therefore necessary that drivers are able to speak the languages in which they are driving, leading to initial training costs.

The issue of driver certification is more difficult to overcome than the language question, and as a result the European Commission has

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<sup>132</sup> See <http://www.railion.com/deutsch/netzwerk/unserEquipment/streckenloks.html>, consulted 02.05.2004

<sup>133</sup> Community of European Railways, 2003, *op. cit.*, note 110, p. 3-13

<sup>134</sup> COM(2004)142, Proposal for a Directive on the certification of train crews operating locomotives and trains on the Community's rail network, p. 6

proposed a European Rail Driving License for Train Drivers in COM(2004)142 as part of its Third Railway Package. The rationale for this measure stems directly from the opening-up of the Trans-European Rail Freight network (see Chapter 3.1.1 above); if the trains are allowed to run across borders, the logical spillover from that should be that the personnel operating them should also be able to operate internationally.

The proposal has received mixed reactions from stakeholders. While there is general agreement in principle that the matter must be dealt with, there is criticism from the UK freight operator EWS that "certification of competence of drivers would pass to the national safety authority"<sup>135</sup>. Their opinion is that responsibility for safety should remain with the railway company itself. With the Third Railway Package only now starting its way through the legislative process, it is impossible to estimate quite what form the final legislation will take, although it can be reasonably safely assumed that a train driver certification system will become law.

Train crews also have the responsibility for the documentation relating to the load that their train is carrying. Each national rail system has different standards of documentation, often carried by drivers on paper. Often a lengthy delay was incurred at borders when documentation was converted. Progressively, electronic systems are replacing the paper-based approach, although the European Commission still considers this matter to be a problem in its 2001 White Paper<sup>136</sup>.

### **6.2.3 Safety matters**

Safety is both a major strength and also an Achilles heel of railways in comparison to other means of transportation. Despite some prominent rail disasters in recent years such as Paddington and Eschede, rail remains an extremely safe means of transport<sup>137</sup>. However, just like all of the other

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<sup>135</sup> Stakeholder reactions to the Commission proposals at:

[http://europa.eu.int/comm/transport/rail/package2003/licence\\_en.htm](http://europa.eu.int/comm/transport/rail/package2003/licence_en.htm), consulted 04.05.2004. The Slovak Railway Company, ZSR, does not have the same reservations as EWS

<sup>136</sup> COM(2001)370, *op. cit.*, note 32, p. 28. Railion has introduced an electronic tracking system for trains between Netherlands, Denmark and Germany:

<http://www.railion.com/deutsch/netzwerk/produktionssystem/cargoLeitzentrale.html>, consulted 04.05.2004

<sup>137</sup> European Commission, 2003, *op. cit.*, note 1, p. 18

technical issues in the railway sector, matters have previously been decided at a national level. The most problematic manifestation of this when it comes to safety is the number of different signalling and train control systems in place in Europe. In the EU-15 plus Norway and Switzerland, a total of 11 different systems are in place, making this matter even more complex than the systems of electricity supply. A map of showing the spread of different signalling systems can be found in Annex III.

The response from the European Commission, working together with the rail industry and financially supporting the initiative, has been to set up ERTMS - the European Rail Traffic Management System<sup>138</sup>. ERTMS is a combined signalling and train control system that can be made compatible with the older national systems, and allows an ERTMS-equipped train to operate on any ERTMS equipped line anywhere in Europe. New lines being built such as the Roma - Napoli high-speed line or the Betuwe Freight line in the Netherlands are being constructed using ERTMS compatible signalling. As the standards for ERTMS have been agreed by the industry, a number of companies (Alcatel, Alstom, Siemens, Ivensys) are competing in the market to provide the signalling systems - an exemplary approach to overcoming the difficulties of interoperability<sup>139</sup>.

A wide variety of secondary safety problems have also had to be overcome, such as the variation of safety rules concerning tail lamps, standards of brakes used on goods wagons, and rules for the acceptance of out-of-gauge loads<sup>140</sup>. The Community of European Railways (CER) identifies a range of such problems in its analysis of key freight corridors; experience shows that such matters can be overcome if the will exists on both sides, but many problems remain to be dealt with, especially concerning transport towards the Iberian peninsula<sup>141</sup>.

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<sup>138</sup> *Ibid.*, p. 14

<sup>139</sup> ERTMS News: <http://www.ertms.com/news/news.htm>, consulted 01.05.2004

<sup>140</sup> Community of European Railways, 2003, *op. cit.*, note 110, p. 11

<sup>141</sup> *Ibid.*, p. 32. Good cooperation is evident between SNCF, DB, CD (Czech Railways) and ZSSD (Slovak Railways), while problems remain concerning RENFE (Spain) and CP (Portugal)

## **6.3 The need for infrastructure investment**

### **6.3.1 Elimination of bottlenecks**

While it is necessary to pay attention to the allocation of network capacity as part of the liberalisation process (see Chapter 5.2 above), investment in the network itself is also crucial if the potential for rail freight is to be maximised. Pelkmans advocates a radical approach; private sector investment in dual track, freight only lines built alongside crucial stretches of railways already in existence would, he argues, have 15 year payback periods for the private sector<sup>142</sup>. The impact on local societies of the doubling of the width of tracks he does not however deal with, but the argument however demonstrates that freight infrastructure investments can be economically viable.

The approach taken by the Community of European Railways is more moderate, opting to analyse crucial European rail freight corridors and identify crucial sections when capacity is limited and infrastructure improvements could be required<sup>143</sup>. In their analysis 3 freight corridors in Europe, the CER identifies many such bottlenecks. For example, on CER Corridor 2 (Germany to the Iberian peninsula, with annex to Slovakia), no less than 12 bottlenecks are identified along 3300km of track. Despite this, CER identifies the corridor as one where high growth rates are expected due to a presently low modal share for rail. One is left to wonder how other corridors, already more saturated, should improve when a corridor with low rail shares has such difficulties.

This approach is in common with the ERRAC goal of 15000km of "mainly freight lines" to be established in Europe by 2020<sup>144</sup>, a target which is complementary to the expansion of high-speed passenger lines which has the knock-on effect of freeing-up traditional lines for freight. It is however vital to pay attention to the small initiatives that can make a large difference to freight flows. The Bundesministerium für Verkehr, Bau- und Wohnungswesen (Federal Ministry for Transport, Building and Housing)

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<sup>142</sup> J. Pelkmans, 2001, *op. cit.*, note 20, p. 446

<sup>143</sup> Community of European Railways, 2003, *op. cit.*, note 110

<sup>144</sup> ERRAC targets quoted in European Commission, 2003, *op. cit.*, note 1, p. 19

lists more than 50 network improvement projects for the German rail network in 2003 - a welcome approach to the easing of bottlenecks<sup>145</sup>. As Stevens lucidly points out, "commuter rail services are critical to the functioning of cities where politics is made"<sup>146</sup>, offering an explanation of why smaller infrastructure projects for rail freight, or capacity allocation issues for the freight sector, are not given the necessary political or budgetary backing.

### **6.3.2 Trans-European Networks (TEN-T)**

A similar criticism in terms of project allocation could be made when it comes to the Trans European Network (TEN-T) priority projects. Despite the commitments of the Commission to rail freight in the 2001 Transport White Paper, the focus of the major TEN projects falls more on the side of passenger transport, and can also be questioned in terms of commitment to modal balance. Only two of the projects approved in 1996 - the Betuwe Line between Rotterdam and the German border, and a high capacity rail line through the Pyrenees (which incidentally remains in its earliest planning stage) - are dedicated to rail freight<sup>147</sup>. The importance of these projects cannot be ignored; as Annex I shows, the Netherlands has a very particular composition of its freight transport that does not lend itself to cross-border freight with neighbours who make much less use of inland waterway. Further, the Community of European Railways highlights the capacity problems for freight through the Pyrenees, especially at the two rail border crossings, giving strong justification for the TEN project<sup>148</sup>.

The value for rail freight of the other TEN-T projects is less clear. 6 of the 20 priority projects relate to high-speed passenger rail networks, projects that require extremely costly investment, with some knock-on benefits for freight. In certain cases - such as a new link between Italy and France through the Alps - rail freight will directly benefit thanks to greater capacity on the existing infrastructure. Further, projects such as the Øresund Bridge between Denmark and Sweden, and the proposed

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<sup>145</sup> <http://www.bmvbw.de/Ausbaubericht-2003-.793.htm>, consulted 03.05.2004

<sup>146</sup> H. Stevens, 2004, *op. cit.*, note 7, p. 89

<sup>147</sup> European Commission, *Trans European Transport Network: TEN-T priority projects*, Office for Official Publications of the European Communities 2003, p. 18-19, 40-41

<sup>148</sup> Community of European Railways, 2003, *op. cit.*, note 110, p. 15

Fehmarn Bridge between Denmark and Germany are of joint benefit to both rail and road freight.

However, it is notable that one of only 3 of the major projects that have been completed to date is the construction of Milan Malpensa airport. It is ironic that one of the main projects of the PACT programme, the precursor to the Marco Polo programme, was precisely intended to reduce pressure on Milan's airports<sup>149</sup>. The Øresund Bridge and improvements to the Irish rail system have also been completed, the latter a relatively limited project with the emphasis on passenger rail. Generally speaking, the European Commission is concerned that, 6 years on from the announcement of the projects, that only 20% of the work has been completed<sup>150</sup>. Of additional concern is the fact that the only TEN-T project in Greece, the country of the EU-25 to transport the least of its goods by freight (see Annex I), is to support the building of an improved railway network<sup>151</sup>.

The clear tendency for Trans European Network funding, which can constitute only 20% of the total funds for a project<sup>152</sup>, is to be seen to be associated with major high-profile developments, with the emphasis on passenger transport, as this proves popular with electorates. In addition, the projects are very equally spread across Europe; each country must feel it is winning from the TEN-T funding, even though this may not be the most effective use of the funding available. A re-assessment of the priorities of TEN-T to direct funding into smaller projects, even ones that are in just one nation state, could make a more profound impact on the problem areas of freight transport.

### **6.3.3 Innovative solutions**

If modal balance is to be maintained until 2010, as set out in COM(2001)370, the Transport White Paper, new ideas are needed to help move freight from roads to rail and other means of transport such as

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<sup>149</sup> See Chapter 6.3.3, and note 155 below.

<sup>150</sup> European Commission, 2003, *op. cit.*, note 147, p. 5

<sup>151</sup> *Ibid.*, p. 22-23

<sup>152</sup> *Ibid.*, p. 5



short-sea shipping or inland waterway. In addition, efficient multi-modal transport has long been an aspiration in Europe but ways to efficiently move goods between modes have not always been easily available<sup>153</sup>. The European Commission has hence launched the new Marco Polo programme for the period 2003-2010, with the aim of stimulating the following activities:

- Start-up support for new non-road freight transport services, which should be viable in the mid-term ("modal shift actions");
- Support for launching freight services or facilities of strategic European interest ("catalyst actions");
- Stimulating co-operative behaviour in the freight logistics market ("common learning actions")<sup>154</sup>.

The Marco Polo programme will replace the PACT programme for intermodal transport that came to an end in 2001. PACT projects have enjoyed some success, with initiatives such as rail services to replace air freight between Schipol and Milan, and a number of new short-sea shipping routes between northern and southern Europe to remove the strain from overloaded land transport axes. These objectives remain in the Marco Polo programme, which will enjoy slightly more funding than PACT; €30 million per year is foreseen for each year of the programme<sup>155</sup>. However, when this is put in the context of the 1% of European GDP that is annually invested in transport infrastructure<sup>156</sup>, the Marco Polo funding is little more than a drop in the ocean, however welcome that might be. According to the Commission the programme will support the major policy initiatives in the freight sector foreseen between now and 2010, with sufficient flexibility to allow reaction to changing market trends not foreseen presently<sup>157</sup>. While this aim is noble, the meagre financial resources available mean the notion of supporting the major policy initiatives is unrealistic.

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<sup>153</sup> H. Stevens, 2004, *op. cit.*, note 7, Chapter on Inland Transport, p. 88-122

<sup>154</sup> Website of the Marco Polo Programme:

[http://europa.eu.int/comm./transport/marcopolo/summary\\_en.htm](http://europa.eu.int/comm./transport/marcopolo/summary_en.htm), consulted 03.05.2004

<sup>155</sup> PACT programmes and Marco Polo funding: COM(2001)370, *op. cit.*, note 32, p. 47

<sup>156</sup> GDP figure from 1995, a drop from 1.5% in 1970. COM(2001)370, *op. cit.*, note 32, p. 50.

<sup>157</sup> Website of the Marco Polo Programme:

[http://europa.eu.int/comm./transport/marcopolo/summary\\_en.htm](http://europa.eu.int/comm./transport/marcopolo/summary_en.htm), consulted 03.05.2004

An additional programme has drawn considerable attention within the rail sector, the so-called 'Rollende Landstraße' or 'Autoroute ferroviaire'<sup>158</sup>. The idea behind these trains is to offer a convenient means of taking trucks off crowded road links, most specifically on Alpine routes. Special low-profile wagons allow trucks to drive onto the train and these are then transported by rail along key routes such as through the Brenner Pass in Austria and, since November 2003, between Bourgneuf (Savoie, France) and Orbassano close to Torino, Italy. A further route is planned between Dresden and Prague - a non-alpine route, but a corridor where roads are already saturated. Such initiatives are not possible across Europe's rail network due to limits on the size of bridges and tunnels. Presently the France - Italy route can only accommodate trucks up to 3.75m high, only 18% of the trucks on Europe's roads. An investment programme will mean that 90% of trucks, up to 4m high, will be able to use the service by the end of 2006. Klaus Ebeling further criticises the concept as being inefficient as the 'dead weight' of the trucks themselves have to be transported, and as the truck-drivers just travel in a passenger carriage they are not using their time productively<sup>159</sup>. Despite this criticism, the possibility of reducing by 50.000 the number of trucks using already crowded Alpine tunnels must be welcomed, even if such initiatives do not fundamentally challenge the dominance of road haulage. The importance of a series of case-by-case measures implemented across Europe should not be underestimated.

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<sup>158</sup> Terms used by Rail Cargo Austria and SNCF respectively. Information about these initiatives from <http://fret.sncf.com/offtrans/transport/transcam.asp>, consulted 24.04.2004, and from interview with François Grossiord and Marie-Claude Rapp, SNCF Direction déléguée aux Affaires européennes, Brussels, 16.03.2004

<sup>159</sup> Interview with Klaus Ebeling, EIA, Brussels, 09.04.2004

## 7 Rail and competing means of transportation

### 7.1 Fair grounds for competition

The 2001 Commission White Paper for the first time dealt with all modes of transport in Europe together in one document. The emphasis was on balance within the transport sector, with the aim of assembling a set of different legislative proposals in all areas that would allow different transport modes to compete with each other<sup>160</sup>. The White Paper summed up the scale of the problem thus:

*"The most recent study on the subject showed that the external costs of road traffic congestion alone amount to 0.5% of Community GDP. Traffic forecasts for the next 10 years show that if nothing is done, road congestion will increase significantly by 2010. The costs attributable to congestion will also increase by 142% to reach EUR 80 billion a year, which is approximately 1% of Community GDP"*<sup>161</sup>.

Further, the reach of road haulage has continued to increase as more and more motorways have been constructed in Europe, while the total length of railway lines in Europe has declined year on year<sup>162</sup>.

For many years the rail industry has complained that the cost of transport by road is simply too low, and apart from transport of very heavy freight, rail cannot compete as a result. To illustrate this point, when asked whether the rail freight targets of ERRAC (see Chapter 4.3 above) could be met, the first response from Klaus Ebeling of EIA was that it depends on what happens to the costs of road haulage<sup>163</sup>. On the other hand, Brian Simpson MEP rubbished these claims, lamenting the blame culture in European railways, stating "the railways have to get their house in order".<sup>164</sup> While Simpson's position may be acceptable when it comes to the improvements that rail services must undoubtedly make in terms of

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<sup>160</sup> COM(2001)370, *op. cit.*, note 32

<sup>161</sup> *Ibid.*, p. 12

<sup>162</sup> European Commission, 2003, *op. cit.*, note 1, p. 3. Between 1980 and 2000, with 1980 defined as 100 for both means, motorway length has shown a 70% increase, with rail length dropping by some 5%.

<sup>163</sup> Interview with Klaus Ebeling, EIA, Brussels, 09.04.2004

<sup>164</sup> Interview with Brian Simpson MEP, Brussels, 17.03.2004

reliability and quality of service (documented in Chapters 5 and 6), a fairer infrastructure pricing regime for roads would be of undoubted benefit to the railways.

Distortions in the Single Market are created as a result of different pricing systems in different modes of transport. Since the First Railway Package, a structure for pricing of access to rail infrastructure has been in place<sup>165</sup>. For air, inland waterway and short-sea shipping no pricing structure exists, while limits are imposed on road pricing in the so-called 'Eurovignette' Directive, 1999/62/EC<sup>166</sup>. This directive has been generally criticised as not putting road and rail on an equal footing, and the European Council has requested that the European Commission table new proposals<sup>167</sup>.

## **7.2 Progress on Eurovignette: questionable gains for rail and for the Single Market**

When prices for a particular mode of transport are artificially high or low, economic distortions result. Transport then moves to the mode with the lowest costs, further enhancing the distortion<sup>168</sup>. The hope is that by introducing a revised pricing system for access to road infrastructure, rail freight will be placed on an equal footing with road haulage. Summaries of the costs for 1000 tonne kilometres for the main freight transport modes are given in Annex IV. The total costs are more than four times as high for road haulage as for rail freight. If costs are to be internalised, these costs must be borne by the transport users.

The rail sector had therefore pinned its hopes on the Commission proposal for amendments to the 1999 Directive that was eventually released in July 2003<sup>169</sup>. However, the proposals have been considered to be deficient for

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<sup>165</sup> Directive 2001/14/EC, see H. Stevens, 2004, *op. cit.*, note 7, p. 95

<sup>166</sup> A5-0220/2004, *Report on the proposal for a European Parliament and Council directive amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures* (COM(2003) 448 - C5-0351/2003 - 2003/0175(COD)) Rapporteur: Luigi Cocilovo, p. 28

<sup>167</sup> *Ibid.*

<sup>168</sup> European Federation for Transport and Environment (T&E), *The new Eurovignette directive: Fair pricing or road funding?*, Brussels 2003, p. 1

<sup>169</sup> COM(2003)448, *Proposal for a Directive amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures*

a number of different reasons, most notably as the Commission initially advocated limiting road pricing only to roads categorised as part of the Trans-European Network, and possible parallel routes competing with these roads. The second major limitation is that the Commission proposal only advocates internalising congestion and infrastructure damage costs, ignoring environmental impacts and the costs of congestion, an omission that T&E says "would be laughable if it were not so serious"<sup>170</sup>. Thirdly, the Commission proposal advocates earmarking funding for re-investment in the road network, somewhat contradictory if the idea if for pricing is to reduce the amount that the road network would be used<sup>171</sup>. On the positive side, road vehicles from 3.5 tonnes upwards would fall under the scope of the pricing system, a move that would be welcomed by the railways<sup>172</sup>. It is clear that the European Commission feared a public backlash from wide-ranging and radical proposals, fearing that citizens would view such a system as a means to impose what looked like an additional tax. This fear bears a resemblance to the response of the European Union Road Federation to the proposals<sup>173</sup>.

The European Parliament looks to be defending a position that would be far more favourable to the railways by taking a more wide-ranging approach than the original Commission proposal. The European Parliament's rapporteur, Luigi Cocilovo, in a report that at the time of writing has already been adopted in the First Reading, was willing to advocate that revenues from road charging should "explicitly support, by direct aid, less environmentally damaging transport modes and projects to encourage the use of infrastructure with less damaging impact"<sup>174</sup>. Further, Cocilovo advocates bring the costs of environmental damage and congestion into the scope of road charging, and make the process for allowing non-TEN roads applicable for charges the responsibility of member states.

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<sup>170</sup> European Federation for Transport and Environment (T&E), 2003, *op. cit.*, note 168, p. 4

<sup>171</sup> COM(2003)448, *op. cit.*, note 169, p. 8

<sup>172</sup> *Ibid.*, p. 5

<sup>173</sup> Press Release "The 'Eurovignette Directive': a political option that needs to be explained to Europe's citizens", 20.08.2003, downloaded from <http://www.erf.be/>, consulted 02.05.2004

<sup>174</sup> A5-0220/2004, *op. cit.*, note 166, p. 30

It is impossible to say to what extent the initial positions of the European Commission and Cocilovo's report will be reflected in the final legislation, and proposal would only put in place the framework to allow road pricing; member states themselves would have to take the choice to actually implement the systems nationally. Bearing in mind the sensitivity of the matter, and the fear that citizens will see infrastructure charging as simply another tax, this is by no means certain. However, as the Heads of State and Government committed themselves in Gothenburg in 2001 to the "full internalisation of social and environmental costs" of transport<sup>175</sup>, there are some grounds for optimism that the Commission's target in the 2001 White Paper to achieve modal shift are on the way towards being realised.

The issue of infrastructure pricing therefore remains the most difficult area to predict; the future health of rail freight will be determined to a large extent by what happens in another transport mode.

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<sup>175</sup> Quoted in European Federation for Transport and Environment, 2003, *op. cit.*, note 168, p. 1

## **8 Conclusions: on the right track, but the journey is long**

European policies for rail freight have without doubt come a long way since reference transport was first included in the Treaty of Rome. The European Commission cannot be faulted for its insistence that the plight of rail freight be recognised, and its determination to boldly push for reforms, within the rail sector at least. The rapid acceleration of the amount of legislation related to rail freight matters from the mid-1990s onwards is testimony to that determination. The shorter period of time needed to achieve agreement on the Second Railway Package, and swift progress for the Third Package currently being decided upon, demonstrates that to a certain extent the European Commission's policy line towards the railways has gained a certain momentum. Support from a number of member states that had been keen to reform their railway systems before the Commission started to deal with the matter, and determination from the European Parliament in defence of the European interest, has led to an increasing acceptance of the need for change in the sector.

The direction of the Commission's legislation for the rail sector nevertheless had a considerable degree of inevitability about it. Having previously followed a similar policy in other network industries, and the enduring commitment to the value of the Single Market as a motivating factor for its actions, it can be concluded that there were no options available to the European Commission other than to in some way force the liberalisation of rail freight. The lack of concrete targets is therefore, in a sense, not a serious omission. If no other serious policy options are available, and if there is little light at the end of the tunnel for rail freight, then the argument would be that liberalisation should take place simply because something had to be done. The Commission could, in theory, have assumed control of network allocation or delegated this to a European agency, or have adopted more far-reaching measures for the creation of Europe-wide infrastructure management. While such an

approach may make economic sense, such routes had to be ruled out as being politically disproportional.

Further, given the long history of Europe's railways and systems that have developed over more than a century, and the fact that especially passenger transport remains a largely national matter, any approach other than a means to break down national barriers and incompatibilities on a case-by-case basis could be thought to be unnecessary. Once more the European Union has aptly demonstrated that the elimination of national borders and the dissolution of national systems is easier to achieve than the creation of a uniform replacement system.

Ascertaining whether the package of measures that have made it to the statute book have actually had the desired impact is far harder, especially as the freight market is still undergoing considerable change. Stevens is however clear in his analysis, stating "Only in the mid-1990s, when the Community was obliged to find some way of beginning to apply the principles of the internal market to railway services, would the railways begin to show some sign of a fragile recovery"<sup>176</sup>. Brian Simpson MEP and Jacques Dirand, who are generally of the opinion that rail freight is on the way towards recovery, echo this sentiment<sup>177</sup>. The impact of market liberalisation has not yet been reflected in tonne-kilometres across the European Union<sup>178</sup>. However, the determined efforts of Railion to position itself as the European rail freight player, offering a multi-faceted alternative to road transport, and the breath of fresh air offered by operators such as Rail4Chem and Dillen Le Jeune (DLC) gives grounds for hope.

It is clear that much more needs to be done before the liberalisation process can be considered to be complete; the railway sector must prepare for the complete opening of all freight lines for competition as the

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<sup>176</sup> H. Stevens, 2004, *op. cit.*, note 7, p. 96

<sup>177</sup> Interview with Brian Simpson MEP, Brussels, 17.03.2004, and interview with Jacques Dirand, Community of European Railways (CER), Brussels, 06.04.2004

<sup>178</sup> UIC statistics quoted in *International Freightling Weekly* (Issue 1779, 23.02.2004), "'Loosen up' call to rail operators", p.1, see note 65 above.



main target in the medium term. In the short term a range of smaller issues concerning allocation of safety certificates and network capacity must be adequately dealt with to ensure a reasonable implementation of the legislation already in place.

Market liberalisation on its own will not be enough to ensure that the market share for rail freight improves. The most perfect legislation could be put in place, but unless interoperable locomotives and wagons are available, standards are agreed for safety systems, and driver training and signalling systems harmonised, the benefit of an open market cannot be realised. Although these measures have been somewhat slower than the legislation on market opening, major progress is being made, with the exemplary Franco-German initiatives as a beacon to the rest of the industry in this regard.

While spare capacity is available on many parts of the rail network in Europe, each major route has a number of bottlenecks that need to be overcome with targeted infrastructure investments. This is especially important for rail freight as passenger trains are almost always given priority over freight on sections of network where overcrowding is a problem. In this regard, national governments must continue to invest to improve their rail networks, while a re-focussing of the Trans-European Networks funding of the European Commission towards smaller projects that are of direct benefit to the rail freight sector would additionally have a positive impact.

In addition to the improvements and reforms that the rail sector can itself make, it is important not to see rail as being completely separate from other means of transport. The large imponderable factor when it comes to predicting the future performance of rail freight is therefore the issue of road pricing, the so-called Eurovignette proposals. If member states are bold enough to truly internalise the external costs of road haulage by introducing effective road pricing schemes, as opposed to relying on fuel duty, there is considerable hope that rail transport could be given a major competitive boost, and also receive additional investment as a result.

However, as the development of road pricing schemes are by no means sure, the recovery of rail freight remains somewhat precarious.

The completion of liberalisation, improvements in interoperability, targeted infrastructure improvements, and political commitment to infrastructure pricing for road haulage mean that much remains to be done. Rail freight has been put on the right track to recovery; a combination of political will, and determination to reform from within the sector will ensure that the destination is reached.

## **9 Bibliography**

### **9.1 Primary Sources**

#### **9.1.1 Interviews**

Community of European Railways (CER)  
Jacques Dirand, Senior Freight Adviser  
Brussels, 06.04.2004

European Commission Directorate-General for Energy and Transport  
Jan Scherp, Principal Administrator - Railways  
Brussels, 06.04.2004

European Intermodal Association (EIA)  
Dr Klaus Ebeling, Secretary General  
Brussels, 09.03.2004

European Parliament  
Brian Simpson MEP, PES Group Coordinator in Committee on  
Regional Policy, Transport and Tourism  
Brussels, 17.03.2004

SNCF Direction déléguée aux Affaires européennes  
François Grossiord and Marie-Claude Rapp  
Brussels, 16.03.2004

The author would like to express particular thanks to Jacques Dirand and Dr Klaus Ebeling for detailed interviews and the provision of additional documentation that has proven invaluable.

#### **9.1.2 Official Documents**

COM(95)691, Green Paper, "Towards Fair and Efficient Pricing in Transport Policy - Options for internalising the external cost of transport in the European Union"

COM(96)421, White Paper, "A Strategy for Revitalising the Community's Railways"

COM(2001)370, White Paper, "European Transport Policy 2010: Time to decide"

COM(2003)448, Proposal for a Directive amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures

COM(2004)142 Proposal for a Directive on the certification of train crews operating locomotives and trains on the Community's rail network

Directive 91/440/EEC on the development of the Community's railways

Directive 95/18/EC on the licensing of railway undertakings

Directive 2001/12/EC amending Council Directive 91/440/EEC on the development of the Community's railways

Directive 2001/13/EC amending Council Directive 95/18/EC on the licensing of railway undertakings

Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification

A5-0424/2002, Report on the proposal for a European Parliament and Council directive on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (COM(2002) 21 - C5-0039/2002 - 2002/0022(COD))  
Rapporteur: Dirk Sterckx

A5-0444/2002, Report on the Commission White Paper "European transport policy for 2010: time to Decide" (COM(2001) 370 - C5-0658/2001 - 2001/2281(COS)) Rapporteur: Juan de Dios Izquierdo Collado

A5-0220/2004, Report on the proposal for a European Parliament and Council directive amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures (COM(2003) 448 - C5-0351/2003 - 2003/0175(COD)) Rapporteur: Luigi Cocilovo

## **9.2 Secondary Sources**

### **9.2.1 Academic Literature**

ABBIATI C. degli, Transport and European Integration, EC Publications Office, Luxembourg 1987.

ARSAC M., L'appréhension du service public ferroviaire par le droit communautaire, Université Panthéon-Assas (Paris II), Paris 1997.

BAUCHET P., Les transports de l'Europe: La trop lente integration, Economica, Paris 1996.

BRADSHAW W., "Competition in the Rail Industry" in Oxford Review of Economic Policy, Vol. 13 No. 1 pp. 93-103, Oxford University Press and The Oxford Review of Economic Policy Limited, Oxford 1997.

CLARENCE E., "Railways: A policy derailed?" in Parliamentary Affairs, No. 56 pp. 456-470, Hansard Society for Parliamentary Government, London 2003.

JAY A., The Oxford Dictionary of Political Quotations, 2nd Edition, Oxford University Press 2001.

HÉRITIER A., "Market integration and social cohesion: the politics of public services in European regulation" in Journal of European Public Policy 8:5, p. 825-852, Taylor & Francis Ltd 2001.

HÉRITIER A., "Public-interest services revisited" in Journal of European Public Policy 9:6, p. 995-1019, Taylor & Francis Ltd 2002.

HÉRITIER A., KERWER D., KNILL C., LEHMKUHL D., TEUTSCH M. and DOUILLET A-C., Differential Europe: The European Union Impact on National Policymaking, Rowman & Littlefield Publishers, Inc., Lanham, Maryland 2001.

KIRCHNER C., and IBM Business Consulting, Summary of the Study Rail Liberalisation Index, Brussels 2002.

KIRIAZIDIS T., European Transport: Problems and Policies, Avebury, Aldeshot 1994.

McCONNELL A., "Overview: Crisis Management, Influences, Responses and Evaluation" in Parliamentary Affairs, No. 56 pp. 393-409, Hansard Society for Parliamentary Government, London 2003.

MÖHLE M., Accès aux Réseaux Ferroviaires Européens, Thesis for the Department of Law, College of Europe, Bruges 1999.

PELKMANS J., "Making EU Network Markets Competitive", in Oxford Review of Economic Policy, Vol. 17 No. 3 pp. 432-456, Oxford University Press and The Oxford Review of Economic Policy Limited, Oxford 2001.

POWELL E., "Les references normatifs de l'action publique en France et en Grande Bretagne: les transports ferroviaires dans le contexte communautaire", in Revue Politiques et Management Public, Volume 15, No. 1, Institut de Management Public, 1997.

ROCHE J., Le role de la Commission européenne dans la politique de liberalisation des transports ferroviaires, Thesis for the Department of Politics and Administration, College of Europe, Bruges 1999.

SILLA, O., "Le second paquet ferroviaire: vers une regulation européenne des chemins de fer", in Revue du Marché commun et de l'Union européenne, No. 461, 2002.

SKINNER, I, Briefing on the Eurovignette Directive and Proposed Amendment, Institute for European Environmental Policy (IEEP), Brussels 2003.

STEVENS H., Transport Policy in the European Union, Palgrave Macmillan, Houndmills 2004.

### **9.2.2 European Commission Literature and Articles**

EUROPEAN COMMISSION (with research by National Technical University of Athens), European Energy and Transport Trends to 2030, Office for Official Publications of the European Communities 2003.

EUROPEAN COMMISSION, Handbook of Transport Figures, 2003 Edition, Office for Official Publications of the European Communities 2003.

EUROPEAN COMMISSION, Revitalising Europe's Railways: Towards an integrated European railway area, Office for Official Publications of the European Communities 2003.

EUROPEAN COMMISSION, TEN-T Supported Actions 1983-2003, downloaded from  
[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

EUROPEAN COMMISSION, Trans European Transport Network: TEN-T priority projects, Office for Official Publications of the European Communities 2003.

GROOT, H., Integration of accession countries in the EU: the case for railways, European Commission Directorate General Energy & Transport Railway Articles 2003 \*,  
[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

LUNDSTRÖM, A., EU legislation on railway safety, European Commission Directorate General Energy & Transport Railway Articles 2003 \*,  
[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

SCHERP, J., The new framework for access to the railway infrastructure in the EU: Ensuring non-discrimination and high quality international rail services, European Commission Directorate General Energy & Transport Railway Articles 2003 \*,  
[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

SILLA, O., Creating the internal rail freight market, European Commission Directorate General Energy & Transport Railway Articles 2003 \*,  
[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

VINOIS, J.-A., Creation of a European railway area against the background of the White Paper on European Transport Policy, European Commission Directorate General Energy & Transport Railway Articles 2003 \*,  
[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

\* European Commission Directorate General Energy & Transport Railway articles are published on the website of the European Commission, and each is written by a Commission official but writing in their own individual capacity.

### **9.2.3 Documentation from organisations in the railway sector**

COMMUNITY OF EUROPEAN RAILWAYS (CER), White paper on European Transport Policy, Position of the Community of European Railways, Brussels 2001.

COMMUNITY OF EUROPEAN RAILWAYS (CER), Towards Better Performance of European Rail Freight, Diagnosis and Action Plans of CER Corridors 2-3-5, Brussels 2002.

EUROPEAN FEDERATION FOR TRANSPORT & ENVIRONMENT (T&E), The new Eurovignette directive: Fair pricing or road funding?, Brussels 2003.

EUROPEAN RAIL RESEARCH ADVISORY COUNCIL (ERRAC), Towards a Single European Railway System: A Joint Strategy for European Rail Research, 2001.

EUROPEAN RAIL RESEARCH ADVISORY COUNCIL (ERRAC), Strategic Rail Research Agenda 2020 - Technical Annex: A Turning Point for European Rail Research, 2002.

### **9.3 Internet Research**

Due to the relative lack of academic articles about European railway policy, a large part of the research for this thesis has been internet research. URLs for websites that have proven to be of use have been included in footnotes throughout the text.