FREIGHT BUSINESS RESTRUCTURING AND ITS IMPACT ON EMPLOYMENT

Report of the CER-ETF Joint European Group chaired by Raymond Hara

Funded with the support of the European Commission DGEMPL/F/1

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Joint European Group Members

Community of European Railway and Infrastructure Companies

CER

The Voice of European Railways

- CFL (Luxembourg)
- DB-AG (Germany)
- EWS (United Kingdom)
- FS-TRENITALIA (Italy)
- PKP (Poland)
- SNCF (France)

Consultants

European Transport Workers’ Federation
SUMMARY
Restructuring of the freight business and its impact on staff

THE SITUATION TODAY: THE RAIL FREIGHT SECTOR IS MAKING A RECOVERY IN SOME AREAS AFTER A LONG PERIOD OF DECLINE, BUT IS ALSO IN A CRITICAL SITUATION IN SOME INSTANCES; IT IS RECONFIGURING ITS BUSINESS ON A EUROPEAN SCALE

Rail freight holds very high potential for growth because of its logistics and environmental assets. Its ability to improve performance and the appropriate political decisions will determine whether this potential will materialise. A level playing field with road transport remains an objective in this respect.

European rail freight has not benefited from the spectacular growth in trade and has not kept pace with the trend towards European integration for several reasons, namely:

- it has been weakened by the growth in multi-drop flows of mass consumer goods;
- it has been relegated to a marginal position to the benefit of road and maritime links which have gained from large public investments on certain routes or in certain ports;
- it has not innovated sufficiently by contrast with the road and maritime modes.

Under the impact of changes in European Union regulations, rail freight has undergone radical transformations. Changes in the institutional framework have triggered major transformations in the organisations and strategies of the main players in European rail freight either by way of anticipation or in reaction to them.

Altogether it must be admitted that:

- progress towards achieving interoperability has been slow;
- the European Commission’s ambitious policies may well risk the prospect of funding shortages;
intermodal competition still suffers from unfair conditions. On this point, the question of cost is fundamental and must be addressed with a view to sustainable development. In particular, external costs should be taken into account to a greater degree.

In this rather unfavourable context, the European railway landscape has changed radically with European rail freight groups being created on the one hand and certain operators emerging as major players in European freight transport and logistics (even though the transport business remains primarily domestic, the fields of specialisation remain are still separate and network management of is still complex), and on the other, the growing complexity of European rail freight structuring due to the emergence of distinctly different types of organisational models.

The European reconfiguration process is not yet finished nonetheless:

- The growing number of operators in the midst of an economic crisis of rare severity is a risky intermediate phase.
- The issue of the future of single wagonloads has serious consequences for employment.

The parameters connected with the volume of employment in European rail freight have become more numerous in the recent period. In the period ahead, the volume of employment will depend notably on the modal share, the ability of the main operators to find a durable economic model and the way in which this sector will reconfigure on a European scale.

RESTRUCTURING AND HUMAN RESOURCES: SUBSTANTIAL CUTBACKS IN STAFFING AND NUMEROUS CONSEQUENCES

The restructuring observed in the recent period has been part of specific and different rationales. The work organisation may change as a result.
This restructuring has led to:

- heavy cutbacks in the workforce, but which were rarely in the form of dismissals;
- different sorts of difficulties for employees remaining in a company, notably with tension around the balance between private life and working life, and new occupational requirements;
- consequences for human resource management: loss of know-how, risk of demotivation, difficult management of the age pyramid, risk of shortage of qualified staff.

**Prospects for growth in rail freight lie more in the medium-term horizon and call for a combination of several conditions to be met to secure success. Maintaining or expanding the level of employment is closely tied with growth in freight traffic. Hence all possible avenues for growth in rail freight must be sought, even though in the initial stage, companies are expanding with staff numbers remaining unchanged.**

**However, in the short term, notably due to the scale of the current economic crisis, employment prospects are poor. In this type of situation, anticipation is a necessity.**

**For rail freight to recover a place in Europe more commensurate with its area of relevance and develop internationally as well as on the domestic front, the proper infrastructure must be provided.**
1. Solid prospects

Rail freight can secure a larger place in continental transport that is expected to expand but the railway projects running late in the trans-European transport network are a source of concern in this respect.

Rail transport has a number of assets enabling it to position its business as an extension of maritime transport and to expand in combined transport. It is necessary, if not indispensable in this respect to develop railway infrastructure in and around ports.

To offset the handicap of break of load, combined transport must make the most of physical performance (train length and load factor, for example), quality and the cost of interface as well as service reliability.

Recovery in the single wagonload sector depends on improving both industrial organisation efficiency and quality of service. Several strategic approaches were observed in the course of our study.

More generally, rail freight performance improvements call for a stronger role as a transport organiser and emphasis on the service dimension.

In the year ahead, the criteria for choosing a transport mode may change radically. Safety and the environment may become decisive strategic variables. European rail freight can become the surface freight transport mode adapted to the world of tomorrow, either through a more active contribution to intercontinental trade or through a stronger presence in European trade or by a clearer identification of its relevance in more than ever highly dense regional or interregional trade.

European rail freight operators’ commercial policy must respond to this new context by capitalising on rail freight’s relevance potential case by case through a precise evaluation of its advantages by comparison with the other modes bearing in mind the natural relevance of these modes on certain routes (road transport for short distance and multi-drop flows, maritime transport for a large part of intercontinental flows) and the growing need to think in terms of combining several modes together to cater to certain flows.
Promotion of European rail freight must be accompanied by strategic decisions by public authorities and the main operators on the market:

- The price of transport is a parameter influencing the logistics decision where public authorities can play a role.
- When constructed with customers, rail freight’s relevance is greater than the usual analyses suggest and requires a precise, multidimensional assessment.

**European rail freight’s future calls for performance improvements. Public policy lines must accompany this process so that rail’s modal share in freight transport increases.**

2. Prospects implying important issues at stake for the workforce

Given the scale of uncertainties and the risks for employment in European rail freight, anticipation is a necessity.

To deal with a complex situation which is a combination of very disturbing risks in the short term and very favourable prospects for the medium term, forward-looking management of employment and of competencies would enable projections into the future and make it possible to prepare for the changes ahead:

- Population variables are a fundamental tool for identifying possible trends and anticipating developments sought.

The issue of retirement plays an important role in this respect, when the retirement age is sometimes uncertain depending on the stage reached in reforms, which can complicate preparation of population projections. Moreover, the trend towards a prolonging the age for the actual departure into retirement situates end-of-career management in new terms. A forward-looking approach means that the issue addressed is not the ideal structure in terms of qualification, job skills, or even position in the hierarchy, but in terms of possible tendencies for change.
In a period of uncertainty, the need to project into the future is paradoxically more complex to formalise, but more necessary to do. This is true in particular in the field of human resource management. The tools for forward-looking management of employment and competencies can be used to effect for this purpose.

- Because of the importance of the job skills learned and perfected in practice in the business of rail freight operators, passing on of experience is a major topic for the future of European rail freight, and even more so in a period of upheavals.

- Discussions and consultation enhance the anticipation effort since they are conducive to seeking out well-balanced compromises on the basis of precise information about the present situation and the issues at stake in the future. When confronted with a risk, even minimal, an attitude of prevention must prompt efforts to arrive at a shared diagnosis between employers and staff representatives. A consultation process can be initiated under the best conditions as a result of this preparatory phase.

The concept of employability is also becoming a useful reference to respond to the need to project into the future, either by creating the conditions for the dynamics of sustainable development of European rail freight or by anticipating the risks of further job redundancies. This concept was used several times either in our group’s internal discussions or by our interlocutors during our visits.

In this respect the CER, ETF and EIM recommended as of 2007 that European railway enterprises apply the strategy of employability, consider it one of the key concepts of human resource policy, and thereby combine the different instruments for development of staff and of the organisation in an integrated initiative. They also recommend that the objectives, principles and framework conditions for introducing this concept in the practices of the enterprise be agreed among the social partners on the basis of social dialogue in order to ensure that the initiative is effective for the two parties.
Training is a privileged instrument to maintain and make the most of the abilities of employees. It is not easy to strike a good balance between the cost / investment for the enterprise and personal effort / durable value for the employee. It may be preferable to optimise training expenditure in order to find a satisfactory compromise for the enterprise and the employee in the short and medium term.

Job attractiveness of can be considered a positive criterion for staff employability.

The practice of multi-tasking, reinforced, must be defined precisely and accompanied in order to include the concepts of railway safety and control over occupational risks. When multi-tasking is designed to broaden occupational experience, it can be considered a vector for improving workforce employability.

The development of rail freight towards greater emphasis on the transport organisation and service dimensions gives rise to the emergence of new professionalities more than to creation of new skills. Although these professionalities are specific to rail freight, they include components that are the same in other activities in the world of transport and logistics. In this respect, the point therefore is to devise a solution adapted to each precise situation, striking a satisfactory and competitive balance between the service provided, the cost of the service and employee working conditions.
KEY DATES

1991
The railway reform in Europe was launched with Directive 91/440 entitled “Development of the Community’s Railways”.

2001
The first railway package was adopted, making it mandatory to separate accounts for passenger services from those for freight.

2003
International rail freight services were opened up to competition.

2006
Domestic rail freight services were opened up to competition.

2007
The third railway package devoted primarily to passenger transport was adopted.
European rail freight is faced with many challenges. The environmental issues at stake offer prospects for growth in principle for a transport mode that is recognised for its environmental advantages.

To date in the 27-Member EU as a whole, it is stagnating at a low level, far below its potential. In a context where the mean price of freight transport services is relatively low, the incumbent rail freight operators are facing often difficult situations.

Since the start of the 2000s, the rail freight sector has been the subject of an active policy on the part of the European Commission. The opening up of the market to intramodal competition is the element of this policy which has had the greatest impact on the strategies of the different players, by way of anticipation, adaptation to or in response to this development. The result is a radical reconfiguration. Newcomers are positioning themselves on the market. Most incumbent operators have undertaken or plan to undertake restructuring. Staffing in these companies has been streamlined, in some instances to a large degree. Companies expecting employment numbers in their business to stabilise or even more to increase in the short or medium term are rare.

Yet, because of its logistics and environmental assets, rail freight holds very substantial potential for growth. For these assets to take tangible shape depends of course on rail freight’s ability to improve performance, but also on policy decisions without which it will be confined to a backseat role in the world of transport and logistics. From this standpoint, harmonisation of competitive conditions with road transport remains an objective. In this respect, the review of the White Paper in 2006 conveyed the impression that an ambitious approach to a modal shift had been abandoned.

In these complex conditions, the railway’s European Social Dialogue Committee decided to launch a joint project to analyse European rail freight restructuring and its impact on staff as well as to identify prospects for the future. This project included notably an enquiry conducted at six freight sites in volunteer Member States. The project was presented to the European Commission and validated by it as well as co-funded by the latter and the Railway Undertakings taking part in the project, namely CFL Cargo (Luxembourg), EWS (United Kingdom), Fret SNCF (France), PKP Cargo (Poland), Railion (Germany) and Trenitalia Cargo (Italy). A joint group was set up including representatives of the CER and ETF. The following report contains the findings of this enquiry.
STRUCTURE OF THE GROUP’S REPORT

Before beginning this report which has been produced on completion of nearly two years of work by our group, a few points should be made regarding the method adopted.

Scope of our enquiry. Although they account for roughly 57% of overland freight transport in the 27 Member States of the EU and as such provide an overall picture of the key issues at stake in European rail freight, the six European Union Member States in which our enquiry was conducted are not a representative sample in the strict sense of the term insofar as they do not provide an overall picture of the broad variety of situations today.

Supporting information contained in the report. The following document contains information and analyses pertaining in some instances to the 27-Member EU as a whole, in others to the six countries which hosted our group’s visits, and again in other instances by way of example, to one of the six countries or one of the operators which the group met. The report is structured around observations made during the visits, documents received during these visits and discussions held within the group itself or with other interlocutors over a period of about two years. Various documents selected for their relevance and their topicality were used in preparing the report. When the information presented stems from sources other than the group’s visits, the relevant source is indicated in each case.

Analyses presented in the report. The following document is the fruit of a collective effort. Numerous players have been involved in this work indirectly. The members of the group, listed in appendix, have contributed actively to this joint effort. Hence this is a report reflecting the work by all the members of the group although solely the authors are responsible for the editing of the document.

THE REPORT CONTAINS THREE PARTS:

I. - Part 1 contains an analysis of the changes taking place in European rail freight firstly by situating these changes in the framework of the trends observed in freight transport since the early 1970s, including comparisons with the situation in the United States and subsequently by assessing the upheavals triggered by the changes in European regulations and the strategies introduced by the players.

II. - Following the overall picture presented in Part 1, Part 2 focuses on the restructuring carried out as presented to us during the group’s visits, either in terms of the changes which have occurred or are ongoing or on the basis of projects presented. This restructuring is assessed in the light of the social dialogue practices introduced and their impact on employment, working conditions and human resource management.

III. - In Part 3, the report seeks to identify prospects for growth in European rail freight. The possibilities for change in employment and in measures for forward-looking management of employment and competencies are examined in the light of these prospects.
I.

1970 - 2008

RECONFIGURATION OF THE RAIL FREIGHT SECTOR ON A EUROPEAN SCALE
Rail freight’s modal share fell in European freight transport which grew at a mean annual rate of roughly 3% from 1970 to 2006. The erosion was particularly marked from 1970 to 1990 in the 15-Member European Union. Road and maritime services benefited from this decline.

**INTRODUCTION**

Modal split in freight transport in the 15-Member EU (in billion tonne-kilometres)

- **Situation en 1970**
  - Total: 1,408 milliards de tonnes/km
  - Rail: 20%
  - Oléoducs: 5%
  - Maritime de courte distance: 34%

- **Situation en 1990**
  - Total: 2,331 milliards de tonnes/km
  - Rail: 11%
  - Oléoducs: 3%
  - Maritime de courte distance: 40%


**On completion of the visits made, two key trends emerged: a recovery circumscribed to some zones after a long period of decline in the modal share and reconfiguration on a European-scale of a sector structured on a national scale in the previous period.**
In the 27-Member EU, rail freight's marginalisation continued until 2002 before stabilising. This stabilisation was accompanied by the continued build-up of road transport which became firmly established in 2006 as the prime mode of freight transport in the European Union.

Modal split of freight transport in the 27-Member EU (in billion tonne-kilometres)
THE SCALE OF EUROPEAN FREIGHT TRANSPORT

The data on European freight transport presented here pertains to:

- for road transport, domestic and international traffic carried by vehicles of over 3.5 tonnes registered in the 27-member EU;
- for maritime transport and air transport, domestic traffic and intra-Community traffic;
- for transport by pipeline, traffic by pipeline over distances of more than 40 km.

The purpose of Part 1 is to explain and qualify this trend towards European rail freight's marginalisation, and then to examine the main features of current trends in its organisational structure.

EUROPEAN RAIL FREIGHT REMAINED ON THE FRINGE OF THE SPECTACULAR GROWTH IN TRADE
1.1 Marginalisation of rail freight’s place in the intercontinental transport chain to and from Europe

1.1.1. Globalisation of trade and the maritime transport boom have developed concomitantly

From 1970 to 2006, the volume of international maritime traffic increased 2.9 times from 2.5 billion tonnes of laden goods to 7.4 billion (“2007 Report on maritime transport” UNCTAD). à 7,4 milliards (« Rapport 2007 sur le transport maritime » CNUCED).

This strong growth has been uneven with trade in manufactured goods increasing at a much faster pace than that of raw material and agricultural products. In 1970, 56% of freight tonnage carried consisted of oil and petroleum products and 18%, coal, iron ore, bauxite, alumina, phosphate and grain. In 2006, the other goods predominated (39%), ahead of oil and petroleum products (36%).

Out of the six visits made by our group, two were to major European ports, Hamburg and Le Havre. These visits provided an opportunity to measure the interfacing between the intercontinental, continental, national, and even regional dimensions of freight transport, to observe the vitality and performance of the maritime transport sector, to understand the reasons for road transport’s increasing supremacy, but also to explain the reasons for the trend towards marginalisation of rail freight and identify the main resources at hand for rail freight to be able to reconquer business.

7,4 milliards (« Rapport 2007 sur le transport maritime » CNUCED).

Aircargo: an atypical place in international freight transport, one which is marginal in terms of volume but highly significant in terms of value.

In 2005, 94% of air cargo traffic was international, be it intra or extra-Community traffic (Panorama of Transport. 2007 Edition. Eurostat). In trade between the 27-Member EU and the rest of the world, the proportion of incoming air cargo in volume was negligible and that of outgoing cargo was about 2%. However, in terms of the value of the goods, the proportion of incoming cargo was 20% and of outgoing cargo, 26%, reflecting a positioning on average on high value goods in no way comparable with products forwarded by maritime transport, road transport or rail transport (Source: Directorate-General for Energy and Transport in cooperation with Eurostat. European Commission. Energy and Transport in Figures. 2007 Statistics). Air cargo is shipped in two separate ways: as general merchandise (transit time between 3 days and one month depending on the degree of priority and rate charged) and express cargo (transit time guaranteed between 24 hours and 4 days depending on the destination and the rate charged). For general merchandise, the operators are the airline companies, with Air France-KLM in the lead. For express cargo, the operators are integrators (FEDEX, UPS, DHL, TNT) handling all transport operations (collection and delivery to the customer, inland transport, sorting, customs clearance, air transport).
Roughly 70% of the volume of trade between the European Union and the rest of the world is by sea. Among the 27-member EU main trade partners (Russia, Norway, United States, Brazil, China), Russia is the only country with which the rail share is not negligible: 8% for incoming traffic, with maritime transport as the predominant mode (48%) and pipelines (36%), 13% for outgoing traffic with road as the predominant mode (55%) and the maritime mode (25%).

Modal split of freight transport between the 27-Member EU and the rest of the world in 2006 (in tonnes)

Even though intra-Community trade (28%) accounts for a substantial amount, maritime transport at the main ports in the 27-Member EU is primarily extra-Community transport (58%) (Panorama of Transport, 2007 Edition, Eurostat). The primarily global focus of ports is true in particular for Germany (55%), France (61%) and Italy (67%), but not for Great Britain (35%) or Poland (33%) (“Maritime freight and passenger transport 1997-2005”, Statistics in focus. Eurostat. July 2007).

In the 27-Member EU, in 2005, 41% of the freight handled in the ports was liquid bulk cargo (oil and petroleum products, chemical products, etc.), 26% was dry bulk (coal, iron ore, grain, etc.), 16% large containers, and 17% sundry goods. The proportion of large containers handled in the ports varies considerably from one country to another; there is a high volume in Germany (35%) mainly ascribed to Bremen and Hamburg, a low volume in Italy (15%), Great-Britain (10%) and France (10%) and in Poland (8%) (“Maritime freight and passenger transport 1997-2005”, Statistics in focus. Eurostat. July 2007).
The expansion in world trade has been spurred by a trend towards a lower price of transport over the long term. In 2005, the cost of transport accounted for 6% of the value of world imports compared with 8% in 1980 for a service where the fundamentals had improved notably in terms of transit times (“2007 Review of Maritime Transport”, UNCTAD). This relative cost, which is very low on average, depends on the routes used, the goods forwarded and the modes used. For coffee conveyed between Colombia and Europe, the relative cost is marginal at 3%. However, it remains substantial at 37% for jute shipped from Bangladesh to Europe.

The diminishing relative cost and growth of trade in manufactured goods have been particularly vigorous in containerised maritime transport. In the last ten years, container flows have tripled from Asia to Europe which as a result was on a par in 2007 with the main maritime route for containers between Asia and the United States.

In 1980, container ships accounted for scarcely more than 1% of the capacity of the world fleet. The figure in 2007 is 12%. (“2007 Review of Maritime Transport”, UNCTAD). The growing size of container ships is proof of the decisive importance of economies of scale in this process. In 1995, the largest container ships serving the Europe/Asia route carried roughly 3 000 TEU. In 2000, their capacity rose to 5 to 6 000 TEU. In 2007, it is more in the area of 8 000 TEU. Ships with a carrying capacity of between 10 000 and 12 000 TEU, and even 14 000 TEU are expected in the coming years.

In Hamburg, during our visit to the CTA terminal, the Hyundai Brave of Panama, a ship with a capacity of about 8 500 TEU, or the equivalent of 100 trainloads and 6 000 heavy goods vehicles, was being unloaded. Bearing in mind that a container is loaded or unloaded in less than 2 minutes and that several gantries can operate simultaneously, transhipment, which is generally partial, from a ship like this takes less than 48 hours.

1.1.2. The port of Hamburg: an exception in terms of the rail mode’s positioning

For certain extra-Community flows (Russia/EU or China/EU to mention but the largest flows), rail freight could be an alternative to maritime transport. Today it is present in these flows to a very marginal extent. Between China and Europe, the rail share in traffic in terms of volume is less than 1%. While it is true that the maritime share is overwhelming (85% for incoming traffic and 89% for outgoing traffic in 2006), the road presence is not negligible (5% for incoming traffic and 6% for outgoing traffic) (“2007 Review of Maritime Transport”, UNCTAD). In the light of current parameters, maritime transport’s technical and economic assets leave it without any credible rival on intercontinental routes even when an overland transport...
alternative is possible. Nonetheless the modal share that road transport has gained over equally long distances is proof of a potential accessible to rail freight.

Moreover, a large proportion of traffic to and from the ports for international maritime flows is within rail freight’s reach in principle because it consists of bulk products (for example, coal) or containerised goods (with containerisation, the type of products conveyed is of less importance), conveyed over medium, long or even very long distances. Petroleum is doubtless a more difficult category of products to capture because of the incomparable suitability of pipelines where these exist and because of the presence of oil industry sites in ports. More generally, traffic not well-suited to rail freight is carried by captive transport modes (pipelines, or at times maritime transport) or by transport modes that are inescapable by their very nature on certain flows (for example, road haulage for short-haul multi-drop traffic).

The trend towards giant vessels in maritime transport fosters concentration of flows already in bulk with origin/destination points in Europe through the large world-scale ports. Yet, among the ten leading ports in Europe, the German ports of Bremen and Hamburg are exceptions in terms of the relative importance of rail transport. In the other ports, the trend towards rail freight marginalisation prevailed in traffic to and from the ports despite rail’s assets. Its assets lie in particular in rail’s ability to remove goods from the ports quickly, which is a fundamental parameter given port authorities’ resolve to limit the standstill time of goods in the ports.

Hamburg is the leading railway port in Europe. At Le Havre, as our group saw during our visit, overland transport is overwhelmingly in the hands of road transport. The information we received during our visit of the port of Hamburg enabled us to situate rail freight’s ranking, but also its relevance and potential at this port:

- 30% of port traffic consists of flows with the Baltic area, 90% of which is currently conveyed by sea in feeder traffic;
- 30% of port traffic originates from or is an extension of local flows, and is conveyed primarily by road;
- 30% are European flows with continental origin/destination points and here the rail mode has a large share of 70%;
- 10% are containerised flows.

Hence it is important to grasp the exceptional nature of rail services at the port of Hamburg. By comparison, the port of Le Havre falls within the average for the main ports of Europe. To avoid the structural effects connected with the specific features of port traffic, we shall focus our attention on containerised traffic.
1.1.3. The exceptional nature of the port of Hamburg is connected in particular with containers

On the whole, in the 27-Member EU, Intermodal Transport Units are carried primarily by road and by sea. The rail mode share is marginal except on certain routes, such as the North/South route between the Rhine Valley and the Pô Valley.

Modal split of transport of Intermodal Transport Units (1) in the 27-Member EU

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>3%</td>
</tr>
<tr>
<td>Maritime (short distance)</td>
<td>42%</td>
</tr>
<tr>
<td>Route</td>
<td>55%</td>
</tr>
</tbody>
</table>


The world-scale vocation of the port of Hamburg is visible from the volume of container traffic in particular. In 2005, the Far East accounted for 55% of Hamburg’s container traffic, far ahead of the Baltic area (30%) and central Europe (15%). Hamburg is the second leading European container port. Among the ten leading European ports for all goods combined, it is the only one where containerised traffic is predominant by far: 60% compared with 52% in Algeciras, 41% in Antwerp, 25% in Le Havre and 21% in Rotterdam (“Maritime freight and passenger transport 1997-2005”, Statistics in focus. Eurostat. July 2007).

In Hamburg, the rail share of containerised traffic dropped from 38% in 2002 to 28% in 2005 and then rose again to 30% in 2007. With four times less container traffic, Le Havre is the ninth container port in Europe. The rail share in containerised traffic has fallen from 17% in 1995 to 4% in 2007.
Rail freight’s place in overland traffic with the nine major container ports in Europe

<table>
<thead>
<tr>
<th>Ranking in 2005</th>
<th>Traffic in million TEU</th>
<th>Rail share of overland traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rotterdam (NL)</td>
<td>9.2</td>
<td>9%</td>
</tr>
<tr>
<td>2. Hamburg (DE)</td>
<td>8.1</td>
<td>28%</td>
</tr>
<tr>
<td>3. Antwerp (BE)</td>
<td>6.2</td>
<td>8%</td>
</tr>
<tr>
<td>4. Breman (DE)</td>
<td>3.7</td>
<td>53%</td>
</tr>
<tr>
<td>5. Algeciras (ES)</td>
<td>3.2</td>
<td>4% (1)</td>
</tr>
<tr>
<td>6. Gloia Tauro (IT)</td>
<td>3.1</td>
<td>4% (1)</td>
</tr>
<tr>
<td>7. Felixstowe (UK)</td>
<td>2.6</td>
<td>22% (1)</td>
</tr>
<tr>
<td>8. Valencia (ES)</td>
<td>2.4</td>
<td>7% (1)</td>
</tr>
<tr>
<td>9. Le Havre (FR)</td>
<td>2.2</td>
<td>9% (1)</td>
</tr>
</tbody>
</table>

(i) 2001


The differences which the group observed during its visits and which help to understand the relatively strong position of the rail mode in one place and its marginal position in another are set out below:

» **The port terminals**, Terminal de France (commissioned in April 2006) at Le Havre and CTA (commissioned in 2004) in Hamburg, have the same capacity (roughly 2.5 million TEU in 2007) and are **among the most modern in the world** (automated handling and storage). Compared with this, although it is far older, the **Maschen marshalling yard** is nonetheless the most **modern yard in Germany**, whereas the **Sequence** marshallling yard is **obsolete** in many respects (short tracks, old installations, located away from the port’s current centre of gravity and with poor services to and from the yard).

» **The railway tracks are located near the platforms** of the CTA terminal, albeit after the zone
reserved for heavy goods vehicles (it should be noted that since 2007, the CTB terminal has eight 700-metre tracks). In addition, Hamburg is one of the regions in Europe with the highest rail density (statistics in focus “Regional rail and road transport networks”. 2008, Eurostat). However, at the Terminal de France, the tracks (there are only two) are worked with a rail/road unit (whence an additional break of load) which derails regularly, and looks poor alongside the line-up of HGVs ready to be loaded or unloaded. A single line serves the port.

Road infrastructure congested by the different types of flows and nearing its capacity limits in Hamburg whereas the traffic is relatively smooth at Le Havre because there are motorway access points near the port. It should be noted that the port of Le Havre can be considered as a crossroad of motorways with motorway A 13 leading to the Paris area, motorway A 29 leading to the north and east of Europe and motorway A 28 leading to the south of France and the Iberian Peninsula. Hence there is not the same degree of need to use the rail mode in one port or another.

In Hamburg, local public authorities, owners of the infrastructure and reference shareholders of the HHLA warehousing company have been involved in port matters for many years and have clearly opted to develop rail services. As a symbolic token, our group was welcomed by a representative of the public community of Hamburg at a reception at which the importance of the port and of rail transport at the port were seen as self-evident (it should be borne in mind that the port generates 163 000 jobs in the city-State of Hamburg, 6 500 of which are jobs generated directly). The subject has been addressed more recently and in no way to the same degree in Le Havre.

The catchment zone for rail freight is considered by the port authorities whom we visited to be a distance of over 250/300 kilometres in Hamburg and 500/600 kilometres at Le Havre. This catchment zone is defined by a large number of parameters and is difficult to identify objectively and precisely. Such a large difference can be interpreted in particular as the expression of the compared performance of rail and road to exit from the port area. At Le Havre, this performance is of very good quality for HGVs and of very poor quality for trains. Road and rail performance is much more similar in Hamburg.

The port of Le Havre is an illustration of these difficulties. In Manchester, our interlocutors also emphasised the handicap that poor quality rail access to the ports is in Great Britain today and which is all the more problematic in that the largest British container port, Felixstowe, is nearing saturation and road infrastructure is very
congested around large cities (“British ports, economic territorial changes”, ISEMAR, Summary brief no. 108. October 2008).

As our group saw in particular in Le Havre and Hamburg, smooth interface is especially important for transport which is intermodal by its very nature. This is one of the major differences between the ports from the standpoint of the rail share of container traffic. In this respect, the two main ports in the United States for container traffic with Asia, Los Angeles (8.5 million TEU in 2006, slightly less than Hamburg’s 8.8 million TEU in 2006) and Long Beach 7.3 million TEU in 2006), feature among other things:

- large railway transhipment yards,
- services in double-stack block trains between California and the Midwest,
- administrative integration, with the overland transport service included in the maritime company’s door-to-door service and with a global price for the service and a single reference document (“Readjustment of the balance of containerised traffic in the United States”, ISEMAR, Summary Brief no.106. June 2008).

Our group saw from its visit that the situation at the port of Le Havre at the time of our visit was very unfavourable to rail transport in terms of both installations and administrative facilities.

1.2. Rail freight has not evolved at the pace of the trend towards European-scale logistics integration

1.2.1. Very dynamic European trade in a context of growing logistics integration

In 2006, nearly a third of world trade in value originated in trade within western Europe, which is an indication of the density of intra-Community trade unequalled in other regions. The trends observed at world level are also found within the European Union, but are stronger.

- Intra-Community trade has developed at a particularly fast pace to the point that in the 2000s, it has doubled the volume of extra-Community trade. For example, if a cut rose is not intended for the local market, it very likely to transit via the Aalsmeer auction market adjacent to Amsterdam airport arriving from one of the fifty producer countries and shipped to all of Europe.

- From the start of the 1970s to the early 2000s, high tonnages in freight transport dropped 50% within the 15-member EU. On the whole, transport of coal and iron ore fell while transport of mass consumer products increased.

- Manufactured products account for nearly 80% of this intra-Community trade. The automobile industry, which used to be a domestic industry, is now structured on a European scale. Transport of motor vehicles which experienced strong growth during this period as a result of the build-up of a European organisation of the automobile industry, differs from coal transport for example, because much attention must be given to the integrity of the product and dedicated means of transport used.
Intra-Community flows are increasingly internal to a sector and intra-company flows. Quick response, arrival on schedule, reliability, management and transmission of information have consequently become decisive parameters together with price and the usual characteristics of transport (transit time, transport security, etc.). Logistics integration has become to some extent the necessary counterpart of spatial disintegration.

Freight transport in the European Union has changed radically in the last thirty years while at the same time growing at a rapid pace over an expanding territory.

1.2.2 Rail freight has not evolved at the pace of the trend towards European-scale logistics integration

The trend towards logistics integration on a European scale in an expanding area generates new possibilities for rail freight (more flows over longer distances) but with stiffer requirements. Because of the large amount of capital required for the resources deployed (cost of locomotives and wagons), rail freight’s technical and economic relevance increases with distance, notably over 500 kms. Rail freight can be relevant over shorter distances, however, under certain conditions.

It should be noted that conversely, road transport’s relevance has increased over long distances. Moreover, the metal products carried by road transit on average over 655 km (“Road freight transport by type of product. 2006.” Statistics in focus. Eurostat. July 2008).

We have already mentioned the complexity of this concept of the relevance of a transport mode. A closer analysis shows that rail freight positions are strong on certain international routes, notably between Belgian or German ports and Northern Italy. By contrast, they are weak in particular on routes with the Iberian Peninsula and on cross-Channel services.

Hence, for services from France to Great Britain, it is estimated that HGV traffic on the M20 motorway is the equivalent of 200 trains daily, whereas in 2007, cross-Channel rail traffic could be confined to a single train per day. In Manchester, our interlocutors told us that less than 10% of continental imports arriving in Great Britain are forwarded by rail at present.

Altogether, in the 27-Member European Union, rail freight’s modal share in international overland freight transport is small even though we shall see farther on that this relative weakness is in no way comparable with its place in domestic transport.
Modal split in international overland freight transport expressed in tonnes in the 27-Member EU

In fact, this modal split shows the mean figures, but there are large disparities depending on the type of goods carried:

a. road transport has an overwhelming place in the categories of goods carried in the largest volumes (the five categories of goods most carried account for three quarters of the volumes), leaving a small or marginal share for the rail mode: 75% in manufactured products (17% for the rail mode), 57% for building materials (7% for the rail mode), 70% for chemical products (10% for the rail mode), 78% for agricultural products (13% for the rail mode), 83% in agricultural foodstuffs (3% for the rail mode);

b. the rail mode is present in all freight categories but has a significant place only for certain bulk products for which road haulage is probably ill-suited or partially suited: metal products (32% for rail, 54% for road transport), solid fuel (30% for the rail mode, 10% for road transport);

c. by contrast with rail transport, inland waterways are clearly specialised on specific routes (notably with the ports of Antwerp and Rotterdam as origin/destination points) and with strengths in certain categories of products competing directly with the rail mode: petroleum products (70% for inland waterways, 17% for the rail mode), iron ore and scrap metal (63% for inland waterways, 23% for the rail mode), the solid fuel already mentioned (60%) and fertilisers (44% for inland waterways, 12% for the rail mode).
Within the European Union, rail freight’s modal share lost to the maritime mode, and especially to road transport, is due to numerous factors, some of which are:

» **European integration has been accompanied by vanishing national borders which has benefited road transport to the full.** Alongside this, the failings of railway interoperability (track gauge differences between France and Spain and between Poland and Russia, differences in signalling systems, differences in energy sources, etc.) are particularly detrimental to rail freight. All our interlocutors underscored this difficulty.

» **Rail freight uses ageing infrastructure of non-uniform quality and suited more or less to contemporary flows.** For example, the works carried out at the end of 2008/in early 2009 to modernise the West Coast Line will handicap the astonishingly high proportion (some 43%) of rail freight operations in Britain currently using this line.

» **Road transport now has a good quality motorway network, except in the new member countries.** From 1970 to 2005, the length of the motorway network has more than tripled in the 15-Member EU whereas the length of the rail network has shrunk more than 20%, reflecting a preference for road transport on the part of public authorities and a large part of the population. This trend has been particularly spectacular in France.

<table>
<thead>
<tr>
<th>Railway lines</th>
<th>Motorways</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>43.8</td>
</tr>
<tr>
<td>France</td>
<td>37.6</td>
</tr>
<tr>
<td>Italy</td>
<td>16.1</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.3</td>
</tr>
<tr>
<td>Poland</td>
<td>26.7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>19.3</td>
</tr>
<tr>
<td>15-Member EU</td>
<td>175.3</td>
</tr>
<tr>
<td>27-Member EU</td>
<td>245.8</td>
</tr>
</tbody>
</table>

Evolution of the length of railway lines and motorways (in thousand km)

Figures in parentheses denote the proportion of electrified lines.

The construction of high speed railway lines over the period has generated the inception of a response to the decline of the rail mode, but one which is only localised and solely for passenger transport. **It is seen** that the average freight train speed, reported to us during our visits, is 20 km/h in Poland and 40 km/h in Great Britain, which is far removed from the speed of heavy goods vehicles and very far from the performance of high speed trains. **Of course, the speed of a train says nothing about the standard of quality of the response to customer expectations. Nonetheless, it has been seen that in the road and air modes, this response has been clearly differentiated between traditional forwarding and express forwarding with short and guaranteed transit time, thereby reflecting the importance of this criterion for a part of transport flows.**

**Rail freight has not innovated sufficiently.** The boom in road transport has of course benefited from spectacular expansion of the European motorway network. However, the major improvements in its efficiency have also stemmed from numerous innovations such as higher horsepower and more energy-efficient lorries, use of state-of-the-art information systems for organisational needs, attention to customer service, etc. Rail freight has remained anchored to national territories, has not fully grasped the extent of international transport potential and has not sufficiently developed innovative cooperation based on joint commercial policies which would have offset border crossing difficulties. It has remained focused primarily on bulk products and shaped as a standard service. **To be well positioned on other products and adapted to the requirements of the contemporary economy, rail freight should have evolved towards a more sophisticated service more commensurate with customer expectations.**

**Rail freight has missed the evolution in logistics.** During this period, road transport divided its business into simple transport operations from point A to point B on one hand and a parcels network organisation for bundling and unbundling operations on the other, and more recently has begun handling all or part of shippers’ logistics. In the firms where this was done, the split in the business led to a multitude of small firms coexisting for simple operations on one hand and the rise of major transport and/or logistics firms on the other. Freight transport groups larger than ever before, with broad geographical coverage and the ability to offer diversified, innovative services have emerged since the early 1990s at the initiative the German, British, French and Dutch post offices, which were driven by the resolve to look ahead to the opening up to competition of their traditional business. Despite the historical presence in several Railway Undertakings of road transport subsidiaries which have become large logistics service providers (Schenker in Germany, Sceta and then Geodis in France, NFC then Exel Logistics in the United Kingdom), **European rail freight has not sufficiently demonstrated the logistics advantages of rail transport, thereby accentuating a weak position in respect of shippers, forwarders and road transport and logistics groups alike.**
As a rule, rail transport’s potential should have positioned it in intra-Community trade as the equivalent of maritime transport for intercontinental trade. For a number of reasons involving many different players, this is not what happened. Road transport has been the prime operator in the development of intra-Community trade.

In tonne kilometres carried in intra-Community trade in the early 2000s, road transport (45%) and maritime transport (40%) are largely predominant, far ahead of the rail mode (5%). (Michel Savy, “Freight transport”, Editions d’organisation, 2007).

1.2.3. Rail motorways: an innovation with acknowledged potential but encountering difficulties

The concept of rail motorways has been revived with the Modalohr system, one of the rare innovations in the field of rail freight which our group was able to observe in the course of its visits.

The AFA is an ingenious system for crossing the Alps between France and Italy, notably for dangerous goods (over 40% of the traffic in 2007) under good safety conditions. The short distance worked (175 kms), small-scale use, etc. render the economic equation impossible without subsidies at least in the short/medium terms. Our group’s visit to the Orbassano site at one of the ends of this rail motorway confirmed both the value of the experiment, but also its current limitations.

Bettembourg/Perpignan is a more efficient route from the outset; it is accessible for more types of trailers, the route is long (1050 kms), the service operates seven days a week including on public holidays, the gross road vehicle weight accepted is 44-tonnes, i.e. 4 tonnes more than on the roads (now applicable also for the AFA), transit time is 15 hours and punctuality, 95%. The rail motorway was inaugurated at the end of March 2007 and commissioned in September, but was launched in reality only in December, at which time our group visited the Bettembourg site. The objective of a 60% load factor at the end of the first year of operation appears difficult to achieve given the load factor of 35% achieved in March 2008. In addition to the time needed to build up the business, this new product is facing several difficulties:

- the maximum authorised height of the trailers conveyed on the route (3.97 metres) means in practice that lorries are refused often for a matter of a few centimetres;
- the system is not approved for carriage of dangerous goods;
- road haulage companies consider the price of transport (90 centimes per kilometre) too high.

The visits our group made to Orbassano and to Bettembourg underscored the high ambitions of these two new rail motorways based on the Modalohr concept. If the AFA becomes a durable structure in 2009 with the goal announced, frequencies will increase from 4 to 20 per day and the annual number of trailers could near the current levels of the two main rail motorways (slightly under 100 000 for Wörgl / Brennersee and Freiberg / Novare). If the success of Bettembourg/Perpignan is confirmed, the
increase **between now and 2012/2014** from one to ten frequencies per day would mean roughly 300,000 trailers.

**A comparison between the AFA and R Alpin** (Freiberg / Novare) warrants attention insofar as the two rail motorways share the same purpose, namely to cross a natural barrier, in this instance the Alps. R Alpin began in 2001. Today it is considered a success. In 2002, the first full year of operation, it carried close to 45,000 trailers. Its capacity load factor has been over 80% since 2003. The objectives set for 2010/2011 are for 150,000 to 200,000 trailers. R Alpin indeed has a longer route than the AFA (414 km compared with 175 kms) but above all, it is in a more unfavourable position with regard to two decisive parameters:

- the length of crossing tracks in Italy and the traction horsepower on the alpine part of the route currently limit the number of units per R Alpin train to 19, with a project to increase it to 24/25, whereas the AFA currently proposes 22 units, and is expected to offer 30 subsequently. The AFA therefore has a potential productivity gain of about 15% for an equivalent load factor;

- the small wheel technology used for R Alpin poses braking and overheating problems. As a result, maintenance costs total 13% compared with 2% for the AFA.

Moreover R Alpin benefits from strong incentives in force in Switzerland, where lorry traffic is prohibited between 22.00 hours and 5.00 hours and a tax is levied on HGV traffic.

**The payload to total weight ratio is a clear limitation of the viability of this mode of forwarding from the energy standpoint. However, private automobile passenger transport has grown considerably despite the same limitations. This forwarding mode can therefore be considered as a concept that goes hand in hand with enabling rail freight to expand its range of services.**

The company, Lorry Rail, which is responsible for operating the Bettembourg/Perpignan rail motorway has applied for authorisations to accept trailers measuring eight centimetres more and to accept tanks for transport. Furthermore, it has begun negotiations on the price of the service which can range between 75 and 85 centimes per kilometre. However, if that is the case, **a high load factor will be imperative for this product to survive durably.** The load factor was set at 75% under initial operating conditions to achieve breakeven, as stated during our visit, but it will probably be more than 80% under the new conditions. In other words, we can see how demanding the durable success of this concept is.

In both cases, the rail motorway is subsidised. The subsidy diminishes gradually as the service builds up. Nonetheless, for the fourth year of full operation, in 2005, the proportion of the subsidy was still 40% of the total cost of R Alpin. **The subsidy can be considered as the counterpart of a service of general interest, limiting heavy goods vehicle traffic in a sensitive natural environment.**
1.3. European rail freight weakened on domestic flows

1.3.1. Domestic flows spurred by globalisation of trade and European-wide logistics integration are still the main flows

The average forwarding distance for goods (for all products and all modes of surface transport) in the European Union, including international flows, is 124 kilometres. An idea can be gained of the prevalence of short-haul transport by the fact that 52% of the tonnage carried is over a distance of less than 50 kilometres, and 75% is over less than 150 kilometres (Michel Savy, “Freight transport”, Editions d’organisation, 2007). Hence, in an era of globalisation of trade and of European integration, freight transport on a European scale seems to be primarily a local business and consequently hardly accessible to rail transport.

Indeed, transport of small volumes shipped to multiple recipients over rather short distances is not accessible to rail freight. Yet reductions in stock to a minimum, the just-in-time principle and growth in transport of consumer goods tend to have benefited this type of transport. The predominance of local flows in transport statistics conceals the fact, however, that a large part these flows are the upstream or downstream part of domestic, international or even intercontinental transport. It should be borne in mind that 30% of the traffic at the port of Hamburg stems from these local flows originating from or destined for international flows.

1.3.2. Local flows are diversified and are not entirely confined to lorries, despite their current supremacy

Transport of parcels over short distances from several points of origin to serve several destinations falls clearly in the indisputable field of lorries. Among these local flows, this type of transport, performed by operators specialised in transport of parcels, occupies an important place, but it is not the only one. Local flows can also include bulk flows between two industrial sites or terminal cartage of bulk international flows. Rail freight can meet these types of transport demands effectively. Otherwise we would not understand why the average distance worked by rail freight in Germany is only 280 km.

In the 27-Member EU, rail freight’s modal share in overland domestic freight transport expressed in tonnes is marginal.
Modal split of domestic overland freight transport expressed in tonnes in the 27-Member EU

On these domestic flows dominated in volume by construction materials (49%), manufactured products (17%), agricultural foodstuffs (10%) and agricultural products (7%), road transport reigns supreme. For most categories of goods transported, the rail freight share is less than 7%. Three types of products are exceptions to this marginality: metal products (19%), iron ore and scrap metal (23%) and solid fuel (40%) (Panorama of transport. 2007 Edition. Eurostat). In other words, in domestic transport rail freight is confined to a positioning on bulk products whereas the range of products is more diversified in international traffic.

Yet, domestic transport in the 27-member EU comprises half of rail traffic (in tkm). With the exception of Luxembourg (17%) for obvious reasons, this proportion is the average for Germany (46%), Italy (53%) and France (60%). It totals 72% in Poland and 89% in the United Kingdom (“Rail freight transport in 2005”, Statistics in focus, Eurostat. February 2007).

It should be said that only 27% of domestic rail freight is over distances of more than 500 km, most of which (56%) is between 150 and 499 km, and despite the objective difficulties already mentioned, 13% is between 50 and 149 km, and even 4% over a distance of less than 49 km (Panorama des transports. 2007 Edition. Eurostat).
The question of rail freight’s technical and economic potential arises here again through the possibility of positioning on local flows under certain conditions and with the ability to influence the relevance parameters by adopting a proactive approach, for example by bundling flows of different products stemming from different customers.

1.3.3 U.S. short lines: an exception with no exact equivalent within the EU

There is another category local flows consisting of serving a catchment area, performing bundling and unbundling operations, consolidating consignments for domestic or international flows. This work can be performed equally well by road or rail operators, bearing in mind that there is a strong likelihood that the same mode will continue the forwarding for the main part of the journey. In North America, the short lines have specialised in this business, the rationale being that they cooperate with the large railway companies concentrated on mainline services. This organisational model is often considered today to be a key element in securing the success of rail freight in North America.

Rail freight’s modal share and its growth over the last fifteen years are one of the yardsticks of this success;

Modal split of freight transport in the United States (in billion tonne-kilometres)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oléoducs</td>
<td>21%</td>
</tr>
<tr>
<td>Navigation intérieure</td>
<td>12%</td>
</tr>
<tr>
<td>Route</td>
<td>30%</td>
</tr>
<tr>
<td>Rail</td>
<td>37%</td>
</tr>
</tbody>
</table>

Situation en 1990
Total: 4 162 milliards de tonnes kilomètres
EUROPEAN RAIL FREIGHT REMAINED ON THE FRINGE OF THE SPECTACULAR GROWTH IN TRADE

1970 – 2008
RECONFIGURATION OF THE RAIL FREIGHT SECTOR ON A EUROPEAN SCALE

This success must nonetheless be viewed relatively, bearing in mind the particularly favourable conditions rail freight enjoys in the United States:

» From the regulatory standpoint, the situation is the reverse of that in the European Union today: rail transport is operated in the United States in a uniform manner throughout the entire country, whereas road transport is governed by regulations that are different from one State to another.

» The small number of engineering structures (tunnels for example) over a large part of the rail network limits the technical constraints and makes it possible, for example, to run double-stack block trains.

» With the exception of transport inside certain large cities, passenger railway traffic is virtually inexistent and consequently the rail network is a network practically dedicated to rail freight.

PASSenger Transport in the united states

In the United States, passenger transport in 2004 was primarily by private car (86%) and by air (11%), far more than by road coaches (3%). Rail transport accounted only for an infinitely small share of 0.3%.

Rail freight in the United States is structured around several supporting players:

1. **The IMC** (International Marketing Companies) act as a sort of one-stop shop for shippers. Shippers with large volumes purchase rail transport wholesale and re-sell it as a retail product. Others act as consolidators. Ship-owners use domestic freight to fill empty containers.

2. **The major railway companies**, called class 1 railways, operate on the basis of large flows over medium and long distances. Union Pacific (roughly 49,000 employees) and BNSF (roughly 40,000 employees) are among the main companies.

3. **The regional companies**, called class 2 railways, and local companies, called class 3 companies, are the **short lines**.

   The short lines operate on a given segment which they themselves manage (rail infrastructure, locomotives, handling gear), with the exception of wagons; this strategic asset is owned by the shippers or by the major companies.

   By way of example, BNSF works with local companies which handle a few hundreds of wagons per year and regional companies which handle several ten of thousands. Altogether this accounts for close to 20% of BNSF turnover. Their business can also be considered as consisting of bringing traffic to the majors. This business is highly dependent on **local presence**, **the ability to bundle traffic from small customers**, **provide traction on secondary lines** and **operation of a service for the first or last kilometre**.

The short lines run their business either by contracting directly with a shipper for short-distance traffic, or on the basis of contracts with the majors spanning a period of one or two years. Despite a considerably lower cost structure than that of the majors (limited structural costs, low operational costs, large degree of flexibility), the short lines have very small profit margins (cost of local presence notably in terms of available resources in locomotives and train drivers) which severely limit their internal financing ability for maintenance and renewal, investments in infrastructure and in rolling stock. Hence they are dependent on public subsidies in this respect especially since they have often inherited secondary lines in poor condition. The customer service which is designed as a local service, is considered the main strength of the short lines.

Unless they gradually take control of regional networks, the short lines are on the whole most often very poorly self-sufficient.
It should be said that the current structure of the network is pushing rail freight in the United States to its limits: saturation of certain hubs (in particular, the Chicago area and its 80 marshalling yards through which roughly 40% of the traffic in the United States passes), a high proportion of single lines (in particular in the southwest United States), impossibility of running double-stack trains on part of the infrastructure (in particular in the eastern United States), poor condition of secondary lines.

This same organisation exists in Canada also. There is no strict equivalent in Europe, except perhaps in Sweden. Projects are emerging in France, in particular, to promote this type of organisation on the basis of local or regional initiatives.

(“Local rail operators, gateway for sustainable development” Jacques Chauvineau and Olivier Mège, Transports, n°447, January-February 2008).
NEW ERA FULL OF UPHEAVALS FOR EUROPEAN RAIL FREIGHT
Our group’s visits took place in a radically new context for the sector, namely the visible presence of rail competitors, Trenitalia Cargo at Turin Orbassano, Fret SNCF at Le Havre and PKP Cargo at Krakow, acquisition of a shareholding in CFL Cargo by its main customer Arcelor, integration of EWS in the DB Group and Railion management’s presentation of a global strategy. Chapter 2 describes the novelty of the period from this standpoint.

2.1. The changes in European Union regulations have led to radical transformations

2.1.1. In less than a decade, the European Commission has radically transformed the institutional framework for operating European rail freight in Europe

The railway reform in Europe was launched with Directive 91/440 entitled “Development of the Community’s railways” advocating a separation between operation of services and management of infrastructure. This separation had a major impact on the way national railway systems are run, with different systems introduced, namely full separation accompanied by a split between a multitude of operators in Great Britain, separation in the framework of a unit kept within a public holding public in Germany, a distinction between the owner and system manager in France.

For rail freight, the changes emerged with the first railway package presented in 1998 and adopted in 2001. In point of fact, Directive 2001/12 revisited Directive 91/440, notably making it mandatory to separate accounts for passenger and freight services. Directive 2001/13 modified Directive 95/18 by defining the conditions in which undertakings can obtain a licence to operate rail freight services on the Trans-European Rail Freight Network (TERFN), leading to opening up these international services to competition as of 15 March 2003.

The White Paper, published in September 2001, entitled “European transport policy for 2010. Time to decide” defined a body of policy which translated into three major lines of development for rail freight:

- The objective was to restore the balance among transport modes, in particular by increasing rail’s share in the freight sector.
- Development of a trans-European transport network was considered a pre-requisite for the revitalisation of rail freight.
- The creation of a European railway area was intended to be a major policy incentive for achieving this revitalisation.

The second railway package, presented in 2002, was adopted in 2004. Directive 2004/51 modified Directive 91/440 once again, in particular by emphasising the link between improvement of rail freight performance and opening up to competition. The opening up of the market to competition on international, services was initially set for 2008, but was enlarged as of
1 January 2006 creating the possibility for rail cabotage. A year later, the opening up to competition also pertained to domestic services. Regulatory bodies were created, in particular the European Railway Agency, under Regulation 881/2004. The Agency is mandated notably to draw up the Technical Specifications for Interoperability in collaboration with the players in the sector, before submitting these to the European in the form of recommendations. After consultation of the Member States, the Commission notifies the TSIs which then take effect.

The European Railway Agency

The Agency’s objective is to provide technical input for implementation of European Union legislation, in particular to create a European railway area with a high standard of safety, by reinforcing railway interoperability and developing a common approach to safety.

In 2006, the European Commission presented a mid-term review of the White Paper on European transport policy in which the concept of “co-modality” was introduced to underscore the importance of optimal use of the different transport modes, whether used on their own or in combination. This co-modality implies use of fewer transport units (vehicles, wagons, vessels) for more freight carried.

The third railway package was presented in 2002 also, and adopted in 2007. It focused primarily on passenger transport. Directive 2007/59 on the certification of train drivers operating locomotives and trains on the railway system in the Community transposed the CER-ETF agreement into Community law.

Altogether, the institutional framework for the operation of rail freight has been radically transformed in less than ten years, producing, in anticipation or by reaction, major changes in the organisations and strategies of the main players in European rail freight.

2.1.2. Little progress made in terms of interoperability, except for the European train driver’s licence and working conditions for cross-border services

Interoperability is a pre-requisite recognised by the European Commission for the international development of rail freight. The creation of a trans-European railway network is the oldest interoperability project since the development of a Trans-European Railway Network was presented in the framework of the White Paper on Growth, Competitiveness and Employment in 1993. Fourteen priority projects were chosen by the European Council in Essen in December 1994. The list was subsequently expanded to thirty projects, over half of which pertained to railway infrastructure. Six of the thirty projects were completed. The other have suffered major delays since nearly half of them are not expected to be completed before 2020.
In 2001, The White Paper on European transport policy planned for investments targeted at “the gradual development of trans-European corridors for priority or even exclusive use by freight trains. These will consist mainly of existing lines.” In June 2006, the project to promote a freight priority railway network was mentioned again in the European Commission Communication entitled “Freight Transport Logistics in Europe – the key to sustainable mobility”.

In another communication entitled “Towards a rail network giving priority to freight” in October 2007, the Commission recognised the slow progress towards interoperability and the remaining difficulties at borders.

The renovation of the corridors is a first illustration of this slow progress. For the six primarily freight European corridors chosen (used 50 to 75% by freight traffic at present), the infrastructure will be renewed by deadlines currently identified for 2020 or even later:

» Corridor A between Rotterdam and Genoa for which work is scheduled to be completed in 2020.

» Corridor B between Stockholm and Naples.

» Corridor C between Antwerp and Basel or Lyon where the completion date is connected is tied to work on the Rhine-Rhone high speed line, here again, around 2020.

» Corridor D between, Valencia, Lyon, Turin, Ljubljana and Budapest where the completion date is connected is tied to work on the Lyon-Turin high speed line, at best in 2023.

» Corridor E between Dresden, Prague, Vienna and Budapest.

» Corridor F between Duisburg, Berlin and Warsaw.

In its October 2007 Communication, the Commission stated its intentions for the freight corridors, the main points of which are:

» Propose a legal definition of a freight-oriented corridor structure setting out the main rules applying to this type of corridor.

» Encourage Member States and infrastructure managers to create corridors so that each State will have to be participating in at least one corridor structure by 2012.

» Propose a legislative measure on the publication of quality indicators.

» Ask the corridor structures to draw up a programme of investments aimed at eliminating bottlenecks and support measures for long (at least 750 meters) and high-tonnage trains (2 000 tonnes).

» Propose additional legislation on the international allocation of train paths and on the priority accorded to international freight, including in the case of traffic disturbance.

» Encourage corridor structures and infrastructure managers to set up, together with the players concerned, an efficient and appropriate network of terminals and marshalling yards.
In September 2007, the CER and UIC presented a study showing that the investments needed for complete renewal of these corridors (elimination of bottlenecks, increase in capacity, construction of new terminals and migration to ERMTS) were estimated at 145 billion euro, only a quarter of which were covered by existing budgets. The Commission's ambitious plans are therefore in danger of coming up against insufficient funding.

Railway interoperability is a complex subject which also includes traffic management, for example. The six corridors mentioned earlier were selected first of all to be equipped with ERTMS.

ERTMS is intended in particular to replace some twenty different signalling systems in place on European railway networks, to lower the cost of locomotives as a result and to increase traffic throughput. For European rail freight, the corridors should be equipped with ERTMS level 1, with priority for Rotterdam-Genoa, Antwerp-Basel and Valencia-Budapest.

Nonetheless numerous difficulties are limiting the value of this innovation to date:

» the system specifications are not yet stabilised;

» the time horizon for application of the system is relatively far off, around 2020;

» the cost of implementation of the system will be followed by the full advantages of the system only in the long term. Consequently, in a first stage, locomotives will have to be equipped both with ERMTS and current systems to be able to run on adjacent lines, unless they are entirely dedicated to corridors equipped with ERTMS.
The European Rail Traffic Management System is a railway signalling system based on computer technology and telecommunications, consisting of a train traffic control-command system (ETCS) and a ground-to-train communication system (GSM R) for the higher levels of the system. Level 3, the highest level, includes continuous transmission of information by radio (intermittent transmission by beacons in level 1), fail-safe speed control (in all three levels), cab signalling (not in level 1), automatic tracking of the train location by the system itself (train detection by track circuits in levels 1 and 2).

- The French project, Astrée, begun in 1986, is the forerunner of ERMTS.
- DB and SNCF worked on this project together between 1988 and 1995.
- An ERTMS EIG Users Group was set up in 1995 by DB, SNCF and FS.
- An industry group, UNISIG, was set up in 1998.
- The first version of the system, called version 2.0.0. came out in 2001. It was validated by the European Commission.
- Several versions followed: 2.2.2. in 2002, 2.3.0. in 2004, 23.0. North Corridor in 2005, 2.3.0. b in 2008. The European Commission adopted version 2.3.0. in April 2008.
- Version 3.0.0, which is to remain stabilised for at least five years is announced for 2012/2013.

“ERTMS: Deplorable European governance”, Jacques Pellegrin, creator and former Director General of the ERTMS EEIG, Transports, no.448, March-April 2008

 Altogether, the most significant development in the field of interoperability with a short-term impact is the European train driver’s licence. This development is important insofar as:

- it specifies the regulatory framework in force for train drivers working on cross-border services;
- it illustrates the decisive nature of European social dialogue since a large part of the directive on train driver certification contains the terms of the agreement signed on 27 January 2004 by the European social partners, CER and ETF even though more than three years went by between the signing of this agreement and the directive.
NEW ERA FULL OF UPHEAVALS FOR EUROPEAN RAIL FREIGHT

1970 - 2008
RECONFIGURATION OF THE RAIL FREIGHT SECTOR ON A EUROPEAN SCALE

THE APPTITUDES AND COMPETENCIES REQUIRED

The agreement specifies the common rules pertaining to five types of aptitudes and competencies required:

- physical aptitudes;
- psychological aptitudes;
- verification of professional aptitudes;
- recognition of competencies pertaining to the infrastructure in the other Member States (general knowledge, rolling stock knowledge, knowledge of lines worked and of installations, language competences).

The same is true for working conditions for mobile workers in interoperable cross-border services. European Union Directive 2005/47 contains the entire contents of the other joint CER-ETF European agreement of January 2004 on the subject.

For a key part of European rail freight transport policy, namely interoperability, developments occur over a long period, except on subjects illustrating the effectiveness of European social dialogue. Under these conditions, there is a risk that European rail freight policy be assimilated with the opening up to competition.

2.1.3. The conditions of competition between modes are still not equal

The issue of the price of transport is crucial. A tendency to undervalue the price of transport illustrates the fact that shippers consider that transport is an adjustment variable. The most powerful road transport operators have skirted around this situation by creating value through express parcels and logistics services. Since it has not followed this trend, rail transport has often suffered from the low price of transport. By way of illustration, according to CFL Cargo’s management, the price of a tonne-kilometre rose from 6.2 centimes in 1991 to 4.4 centimes in 2002. Because of the complexity of rail freight, this situation has probably contributed both to the decline of the rail mode’s share in European freight transport by placing it outside the market at times and to the deterioration of operators’ economic situations.

Being in a dominant position, road transport steers the price of transport. The low price of road transport can be achieved only by the existence of infrastructure charges focused solely on motorways and at a level in no way commensurate with the external costs borne by the public community due to heavy goods vehicle traffic (road congestion, noise, safety risks, contribution to greenhouse gases, etc.). It is estimated that these external costs are 4.5 times higher for road freight transport than for rail freight.
In addition to this, there is the impact of both common-law exemptions regarding working time and fiscal measures that are favourable to road transport at times. Speed limits and observance of these speed limits as well as the permissible total laden weight are moreover fundamental parameters for the relative competitiveness of the road and rail modes.

The European Commission has made commitments in this field through Eurovignette directives. Directive 1999/62/EC pertained to charging of heavy goods vehicles (of over 12 tonnes) for the use of certain infrastructure (motorways of similar roads, mountain roads, bridges and tunnels). It made provision for setting minimum rates for the charges, but left Member States the possibility to apply lower charges or exemptions.

In the wake of the small impact of the first directive, the very broad differences in taxes and charges on heavy goods vehicles and the complexity of the charging systems, the Eurovignette II directive adopted in May 2006 aimed to establish a new Community framework for charging for use of road infrastructure. The directive was to pertain to vehicles between 3.5 and 12 tonnes as of 2012. Near the deadline set in June 2008, few countries had transposed this directive into national law.

In July 2008, the European Commission presented a communication entitled “Greening transport”. To improve the road freight transport’s environmental performance, this communication envisages a proposal for a Eurovignette III directive aimed at taking account of external costs (environmental damage, noise and congestion) in calculation and modulation of the amounts of charges.

The debate on authorisation of 60-tonne mega trucks in the European Union (compared with 40-tonnes in Germany, France, Great Britain and Poland, and 44 tonnes in Italy and Luxembourg) which was mentioned during our group’s stay in Manchester, illustrates in another manner, the importance European Union regulations from the standpoint of rail freight’s modal share.

Indeed, this development would meet the objective which the European Commission set recently of transporting more freight with fewer transport units considering each transport mode in isolation.

However, the report entitled “Mega-trucks versus rail freight?” (UIC-CER, 2007) has shown to what point this debate underscored the unfair playing field between the road and rail modes:

Heavy goods vehicles pay infrastructure user charges only on certain routes whereas rail freight pays user charges systematically.
Road transport would be given a considerable productivity advantage (authorisation of mega-trucks would reduce the per-unit cost of long-distance road transport by 20 to 25%) whereas even in terms of sustainable development and transport safety, the choice should be the reverse.

Working conditions for drivers and observance of regulations are substantially different between the two modes.

Mega-truck traffic would generate costly adaptations to road infrastructure. There would be a risk that the investments that would have to be made would handicap the investments needed for railway infrastructure.

Such authorisation could speed up and reinforce an already existing trend. It is a fact that the mean lorry load in the EU has risen from 12.3 tonnes in 2000 to 13.1 tonnes in 2005 (“Average loads, distances and empty running in road freight transport. 2005”, Statistics in focus. Eurostat. October 2007).

2.2. Profound change in the European landscape in the rail freight sector

2.2.1. Some rail freight operators have become major players in European freight transport and logistics

Mergers and acquisitions have taken place in the world of road freight transport over the last fifteen years in Europe at the initiative of three types of players which have become predominant. The national Post Offices, and first and foremost Deutsche Post, have used their experience and power to invest in the field of express parcels, clearly a field closely tied to their original profession (nation-wide network organisation, multi-drop traffic, collection / bundling / unbundling / delivery, short transit times, etc.). Logistics providers, notably in the United Kingdom, have emerged to take charge of distributors’ logistics, like Exel. German and Swiss freight forwarders founded to accompany industrial export growth have consolidated their business (Kühne & Nagel).

THE CASE OF DEUTSCHE POST AG

Deutsche Post AG has successively taken control of the German firms DHL and Trans-O-Flex, British firms Exel, Tibbett and Britten, and Securicor, the Swiss firm Danzas, the Dutch firm Nedloyd, the French firm Ducros, the Swedish firm ASG, The US firms Air Express International and Burlington.

It is clear from this example how much the choices made by public authorities in the regulatory field can have a structural impact on the relative relevance of transport modes.
This process has erased the borderline between certain professional skills, in particular between post office professional skills and those of the other skills in freight transport and logistics. This vanishing borderline has not directly affected the professional skills in rail freight. Of course, in the most powerful rail freight operators in Europe, Railion and Fret SNCF, groups have been formed in which the rail freight operators are only a minority in terms of turnover. However, the synergies between the multimodal freight transport and logistics parts on the one hand and rail freight on the other, has not developed. Moreover, in both cases, there were strategic hesitations about the place of the specialised entities in road freight transport and logistics within groups primarily structured by the incumbent Railway Undertakings.

These hesitations were reflected in Germany by back-tracking and turnarounds. The Schenker freight forwarding company, which historically was a subsidiary of German Railways was sold in the early 1990s. Subsequently Schenker joined Stinnes, a transport subsidiary in the Veba industrial group. The DB group ultimately took over all of the business, a powerful entity, in the early 2000s. There were similar hesitations in France, even though they were manifested in a less spectacular manner. Hence, in the recent period, Géodis was firstly considered as not being a part of the freight transport branch in the SNCF group and then was integrated in the group to become the bridgehead similarly to what Schenker became for the DB group in freight and logistics.

In terms of turnover in 2006, DB Schenker rose to fifth place among the world-scale transport groups:

1. Deutsche Post AG
2. UPS
3. Fedex
4. Moller-Maersk
5. DB Schenker

Source. Michel Savy, “Who are the new plays and what are the new strategies in international transport?” Centre for strategic analysis of the French government. 8th session on Globalisation. 20 September 2007.
The same ranking made solely among European companies shows that the sector is currently dominated by groups formed from incumbent public networks in the postal services or rail freight sector:

1. Deutsche Post AG
2. DB Schenker
3. TNT Post Group
4. Kühne & Nagel
5. Freight and Logistics Branch of the SNCF group

It should be said that the direction taken in European Union regulations regarding opening up networks to competition has contributed to this change. Nonetheless, to date, these trends exist alongside a transport business that remains primarily domestic and the persistence of longstanding individual specialist fields acquired. Management of complex networks is the common characteristic of these groups. However the networks remain differentiated: the German and Dutch postal networks for the general public, the road parcels network among others in Géodis primarily in France, the rail freight network for Railion and Fret SNCF, etc.

2.2.2 The rail freight profession is no longer run by national monopolies.

Rail freight shares with the postal sector the fact of having been run during the second half of the twentieth century in the form of public monopolies anchored to the national field. The reconfiguration of the postal sector has produced two of the largest transport groups in Europe, Deutsche Post and TNT Post. La Poste, of French origin, and Royal Mail, of British origin, have followed a similar path, but to a lesser degree. Furthermore, La Poste obtained the approval of the French government to develop a banking business.

There are similarities in the recent changes in rail freight in terms of the fact that rail freight has capitalised on the historical shareholdings in the groups now called Schenker and Géodis.

Nonetheless, the greatest breakaway lies more in setting up European rail freight groups. In the presentations made to our group, the acquisition of a European dimension was felt more distinctly in Germany when the DB

The trend to acquisition of an international posture and to a variety of professional skills performed has clearly modified the European organisation of transport and logistics.

Source. Michel Savy, “Who are the new plays and what are the new strategies in international transport?”, Centre for strategic analysis of the French government. 8th session on Globalisation. 20 September 2007.

The specialist fields of the five largest European carriers

1. Deutsche Post AG  A, B, C, D, F, G
2. DB Schenker  C, D, E, F, G
3. TNT Post Group  A, B, C
4. Kühne & Nagel  D, F, G
5. SNCF Group  C, D, E, F, G

A = postal service for the general public; B = internationally integrated express services; C = parcels; D = road transport; E = rail freight; F = broker; G = logistics
Schenker management announced that it had a 20% share of the European rail freight market and targeted a 25% share in 2012.

In fact, the 2000s were characterised by the DB Group’s very active European rail freight strategy. Positions have been taken on the four major corridors with the German territory as the origin or destination point or as a transit zone.

1. A North/South corridor centred around the routes between the main Belgian, Dutch and German ports on the one hand and on the other, Germany, Austria, Italy and Switzerland. This corridor may have an extension northwards towards Sweden or Norway. DB Schenker’s strategic involvement has been particularly strong on one of the main European freight transport routes. It took the form either of takeover of incumbent operators in Denmark and The Netherlands or of shareholdings in second tier operators in Italy (SFM in 2004 which then became Railion Italia, subsequently Nord Cargo in 2008) and in Switzerland (20% of the capital of BLS Cargo in 2002, and subsequently 45% in 2008), either by creating joint companies Scandinavia (with Green Cargo, the rail freight leader in Sweden), DB Schenker is now very present directly on this corridor with Railion Scandinavia (which integrated Railion Denmark’s staff and the fleet on 1 January 2008), Railion Nederland, Railion Deutschland, Railion Schweiz and Railion Italia.

2. A West corridor centred around routes on the one hand between the northern European ports, Germany, France and the Iberian Peninsula, and on the other between Great Britain, France and the Iberian Peninsula. DB Schenker’s positioning dates from 2007. During our group’s work, DB Schenker took over EWS to become the leader in Great Britain and one of the main newcomers in France. The majority shareholding in the intermodal operator, Transfesa, gave DB Schenker a foothold in Spain.

3. An East corridor centred around routes on the one hand between the northern European ports, Germany, and on the other between some of the new Member States, e.g. Poland, Russia, Ukraine and even China. DB Schenker’s positioning occurred in 2008: a shareholding in East West Railways in Poland, partnership agreements with PKP Cargo to facilitate les EU 43 locomotive traffic between Germany and Poland, creation of a Eurasia Rail Logistics joint venture with PKP Cargo, the Russian RZD and Belarusan BC.

4. A Southeast corridor centred around routes on the one hand between the northern European ports, Germany and on the other between some of the new Member States and Turkey. On this route the question of the partnership with Rail Cargo Austria is paramount insofar as the incumbent Austrian operator is seeking to position itself as the leader in central Europe (credible positioning since its takeover of the Hungarian operator MAV Cargo in 2008).

DB Schenker has become at the same time one of the leading world-scale transport groups and the leading European rail freight group. It is the leading rail freight group in terms of the stature acquired, far ahead of the other groups being formed and in terms of being a powerhouse of strategic dynamics.
2.2.3 A more complex organisation of the rail freight operator business run according to different organisational models

The split in road freight transport on a European scale between different economic models occurred over some twenty years with on the one hand profitable trans-national groups (even though the rates of return are in no way comparable with those of other business sectors) and on the other, small firms at the limit of economic viability.

STRUCTURING OF ROAD FREIGHT TRANSPORT IN GERMANY

70% of road freight transport in Europe is operated by five countries: Germany, Spain, France, Italy and the United Kingdom. Similarly to the rail freight sector, Germany is the leading country both for domestic traffic and for international traffic. By contrast with French companies, which have lost market shares in the last four years, notably to companies in the new Member States in eastern Europe, German companies have withstood well. However mean operating costs are higher in Germany than in France: by 10% for vehicles, by 6% for diesel fuel, double for insurance, and also in terms of user charges since 1 January 2005 (12 centimes per kilometre on 90% of the distances worked in Germany), and difficult comparable for staff costs.

The favourable positioning of German companies is linked, in particular in the study mentioned, with the definition of a range of services commensurate with shippers’ expectations:

- By a positioning of the major German transport companies more in top-of-the-range positions commensurate with the expectations of a large proportion of shippers, thereby placing emphasis on quality of service, delivery on-time and freight security.

- By a low-cost positioning achieved by proposing a service provided by drivers from the eastern Länder (paid roughly 30% less), or by outsourcing to small family-sized firms or local carriers (60% of German companies have less than five employees).

As and when a company does not operate on the basis of the historical organisational model, the question arises as to how the structuring of European rail freight can evolve. An evolution towards a split as mentioned with regard to road freight transport is already visible in these various developments.

The differentiation between organisational models is measured in particular by the degree of continuity or of breakaway from the principle of integration which prevailed in incumbent Railway Undertakings. From this standpoint, three models can be identified.

The first “model” is the most conventional one. The rail freight operator in a country originates from an incumbent Railway Undertaking. Its degree of self-sufficiency in relation to that Undertaking varies. This is the model of the main operators on the scene at present: the German company Railion, the Polish company PKP Cargo and the French company Fret SNCF.

The second “model” emerged a few years ago. It is the result of the European rail freight groups set up which were mentioned earlier. The rail freight operator in a country originates from an incumbent Railway Undertaking. Its degree of self-sufficiency in relation to that Undertaking varies. This is the model of the main operators on the scene at present: the German company Railion, the Polish company PKP Cargo and the French company Fret SNCF.

The third model is more unusual. Some groups seek to integrate rail freight, either by structuring their entity not around freight transport and logistics but on transport services for freight and even for passengers. (Veolia Cargo, particularly active in Germany and France, is the most significant example), or for industrial firms, by controlling a type of transport considered strategic (Rail4Chem which has been active for several years in Germany in the field of chemicals or Seco-Rail which has become active recently in France in the construction and public works sector).

The variety of rail freight operators can also be seen through a differentiation between generalists and specialists. Three types of rail freight forwarding can be identified traditionally: transport in trainloads, transport in single wagonloads, intermodal transport. It can be considered that a generalist operator has the competencies required to operate these three types of traffic irrespective of the type of commodity conveyed. It should be said that in our sample consisting solely of generalists, the diversity of operators’ business varies. Over 45% of the traffic operated by PKP Cargo is coal. EWS traffic is strongly concentrated on bulk products on the one hand (coal, oil, steel), and on containers on the other (15% of traffic). Recently specialists have emerged (their speciality is not exclusive but structures their business to various degrees) in a specific business sector (Rail4Chem for chemicals), a specific field (Veolia Cargo and Rail Link alliance in overland transport of maritime containers), on certain routes (BLS Cargo of the Swiss Lötschberg/Simplon transit line or RTC on the Brenner route between Austria and Italy).

Another possible differentiation can be made in connection with the integrated nature of incumbent Railway Undertakings. Undertakings specialised in leasing of locomotives or in provision of train drivers have emerged alongside wagon leasing companies.
However, significant differences can also be seen in the degree of integration in the railway operator profession for those who have persisted in this approach. Railion manages and maintains its locomotives and wagons by contrast with Fret SNCF where this work is done by other SNCF entities (the SNCF Rolling Stock sector), or by subsidiaries (France Wagons). Another manner of viewing the diversity of organisations currently in place consists of examining the positioning of train drivers. In some instances, for Fret SNCF for example, at the time of our visit they were not managed directly and completely by the rail freight operator even though their business is specialised. In other instances, it is interesting to measure the proportion of train drivers in the staff of the rail freight operator in order to appreciate the diversity of professions performed. In 2006, the proportion was 30% for PKP Cargo at the start of 2007, but close to 42% for EWS.

2.3 The European reconfiguration process is not over yet

2.3.1 The growing number of operators in a deteriorated economic period is a risky intermediate phase.

Uncertainties are following in the wake of the institutional and organisational stability of the previous period. Previously the landscape was dominated by national “champions” among which the three most powerful were Railion, Fret SNCF and PKP Cargo. Today, a European vision is gradually taking root with DB Schenker in the forefront. The same type of changes has taken place in other business sectors. In air transport, developments have led on the one hand to the emergence of world-scale groups (for example Air France/KLM) and on the other, to resounding failures (for example Swissair), often linked with uncontrolled international strategies. In road freight transport, certain groups (for example DHL) have gone through long restructuring periods to bring uniformity to the different profiles of operators acquired in a short space of time.

Usually the phases of opening up to competition in a business sector structured initially by national monopolies result in a growing number of operators. This is what we see for the moment within the 27-Member EU. The number of licences varies considerably in the six countries in our sample. In fact if local undertakings are set aside some of which have existed for many years, in particular in Germany, we find most often between 5 and 10 competitors, with the exception of Luxembourg.
Until now, restructuring in the main rail freight operators has been primarily on a national scale and was intended to resolve a complex economic equation. Even though the process has not been completed yet, the ongoing upheaval may produce another type of restructuring in the coming period. The alliances and take-overs which have occurred over the last period have already radically transformed the European rail freight landscape. There is every sign that this process of European re-configuration is not over, and operators run the risk of being faced with slower growth in their business, or of shrinkage.

2.3.2. The future of single wagonloads: an issue with serious consequences for employment.

In the face of the variety of flows, the smaller proportion of flows of bulk products, a trend for consignments to be more frequent, smaller in size and sent to multiple destinations, there are two main ways in which rail freight operators can position their business:

» Either by developing a model for an organisational structure dedicated to a type of flow, forwarding method, regional territory, on the basis of a partnership with an industrial firm or another transport operator. This type of transport on demand is performed in rail freight by trainloads or by rail services for intermodal transport, in road transport by full loads, in maritime...
transport by bulk. It is the shipper who has control over the business.

» Or by developing a horizontal organisational model. In this instance, a traffic threshold on a given territory is crossed, leading to a transition from handling scattered flows to network-based operations. In rail freight, this involves organising the flows of information and physical flows for a very large number of origin/destination pairs of wagons and arranging for suitable types of forwarding. This complex organisation generates high costs which can only be covered by efficient operations and a high traffic density. This type of organisation exists in parcels services in road transport, in collection and distribution of mail in postal services, in management of containers in maritime transport. It is the carrier who has control over the business.

Considered independently, the business of managing single wagon loads is identified as loss-making for four of the five incumbent operators studied in the framework of our group’s remit. Only Railion manages more or less to break even in this business. This business is also the one that employs the largest workforce (around 40% of Railion’s total staff size). EWS does not have a single wagonload network as such, but can add a single wagonload to a trainload from time to time. However, it is also the only large operator in our group that is not radically different in size from its main competitor in Britain.

The difficulties operators have experienced with single wagonloads stem on the one hand from the fact that operators have not capitalised sufficiently on the advantages of railway logistics and on the other hand from the costs associated with the complexity of production requiring substantial resources under sub-optimal conditions. In addition to this, the following elements come into play in different ways from one region to another:

» Secondary railway lines in non-uniform condition, at times urgently in need of regeneration (it should be said that this problem is not specifically European and that a third of the short lines in the State of Texas are currently in jeopardy due to the amount of track renovation costs).

» Marshalling yards where the location (Maschen or Orbassano were presented by our interlocutors as being well located unlike Sequence), the configuration (some of the tracks are closed at Orbassano for lack of sufficient traffic, while on the contrary other marshalling yards may be too small or unable to be expanded) or the modernity of the installations place limits on performance.

There is a risk that these difficulties will worsen with the deteriorating economic situation. Businesses are not all equally labour-intensive. Because of the complexity of single wagonload production and the fact that it is anchored to a specific area, its level of labour-intensiveness is in no way comparable to that of trainloads or combined transport.
2.3.3. Anxiety about employment prevails in the short term

In this period of uncertainties, which on average tends to hold instability risks for personnel, which vary depending on job skills and qualifications, on the operators and their location and the lines of development adopted, the strategies applied and the content and method of restructuring deployed determine total or partial success or failure. The impact on employment is and will depend directly on these successes and failures.

For personnel, the prime risk is the risk of failure of the company. This fatal outcome may result from excessive recklessness in international positioning strategy. Failure can also result, for an incumbent operator, from inability to maintain the company’s position on the domestic market in this new context or for a newcomer, from underestimating the investments needed to position the company durably in a complex business sector or from developing too risky a strategy. It may also stem from the withdrawal of a safety certificate. Lastly, it may be caused by traffic failing to develop at the pace of the global number of projects of the different operators involved in the European area notably as a result of the economic crisis.

The second risk may be caused by rationalisation in the wake of takeovers. However, it may also be due to the impact of aggressive price competition forcing the different operators to put the organisation under heavy pressure or even to forms of social dumping.

In urban passenger transport, the development of the practice of contracts for delegation of public services implies competitive tendering periodically and hence the possibility of losing the business. The question arises therefore of the implications of this trend for the personnel of the company which has lost the contract. This type of situation is beginning to emerge in regional rail transport. In the rail freight sector, the situation is not comparable insofar as the areas covered by the business are less strictly circumscribed. Nonetheless, a similar situation may occur, for example, in terminal cartage services of a certain size. In this case, the volume of jobs is not necessarily in jeopardy. However, if a contract is transferred from one operator to another, this obviously has consequences on the relevant personnel and can lead in particular to a change of employer and therefore to numerous issues about the conditions surrounding this change.
The parameters that come into play in the volume of employment in European rail freight have been far more numerous in the recent period. In the period ahead, the volume of employment will depend notably on the modal split, the ability of the main operators to find a durable economic model and on the way in which this sector will manage its re-shaping on a European scale. As we shall see in the third part of the report, the prospects for rail freight development lie more in the medium term future and call for several conditions combined to be met to secure success. In the short term, however, employment prospects are not positive.
II. CONSEQUENCES OF RESTRUCTURING ON HUMAN RESOURCES AT THE SITES VISITED
Trends in traffic in kilometres reveal large disparities:

- In the 27-Member EU, there have been two clearly opposing periods: a drop of nearly 30% between 1970 and 2000 followed by 8% growth between 2000 and 2006. If only the twelve most recent member countries are considered, the trend is even starker, with a nearly 50% fall in the first period and modest 6% growth in the second period.

- The trend in each of the six countries our group visited is singular:
  - In Germany, growth recorded between 2000 and 2006 resulted in a return at that date to 95% of the 1970 level.
  - In France, there was a pause in the decline at the end of the 1990s which then resumed at a fast pace in the 2000s to the point of plummeting in 2006 to 60% of the 1970 level.
  - In Italy, growth was weak but regular throughout the period, which resulted in the best performance out of the six countries examined.
  - In Poland, traffic fell 45% before stabilising, resulting in the worst performance of the countries examined.
  - In the United Kingdom, a moderate fall was followed by fairly vigorous growth.

### Trends in traffic in kilometres per zone (in billion tonne kilometres)

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<td>Germany</td>
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<td>121</td>
<td>102</td>
<td>83</td>
<td>107</td>
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</tr>
<tr>
<td>France</td>
<td>68</td>
<td>69</td>
<td>51</td>
<td>55</td>
<td>41</td>
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<td>19</td>
<td>23</td>
<td>24</td>
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<td>0.6</td>
<td>0.6</td>
<td>0.4</td>
<td>-42%</td>
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<td>132</td>
<td>82</td>
<td>54</td>
<td>54</td>
<td>-45%</td>
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<tr>
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<td>16</td>
<td>18</td>
<td>23</td>
<td>-6%</td>
</tr>
<tr>
<td>15-Member EU</td>
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<td>290</td>
<td>255</td>
<td>255</td>
<td>280</td>
<td>-1%</td>
</tr>
<tr>
<td>27-Member EU</td>
<td>551</td>
<td>641</td>
<td>525</td>
<td>401</td>
<td>435</td>
<td>-21%</td>
</tr>
</tbody>
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Note: for Germany, data for the years 1970, 1980 and 1990 includes the Democratic Republic of Germany.

The disparity in economic and financial positions is no less than the disparity in traffic trends in kilometres.

The international statistics published by the UIC contain no information about the balance sheets of the rail freight operators in our sample. For the most part, the most recent publication concentrates information on the accounts of the Railway Undertakings. Traditionally at this level, the financial involvement of the States complicates the analysis. It can simply be seen that among the Railway Undertakings there is a very heavy debt position for DB despite an ideal initial position cleared in 1994, which contrasts with the low level of SNCF debt.

The DB debt position is logical in the light of the highly ambitious policy conducted in the 2000s, in particular the very active external growth policy for the freight business. It should be borne in mind that heavy debt has a cost, especially in a period of high interest rates, and reaches limits at a certain level. The SNCF reached these limits in the mid-1990s, leading to the 1997 reform. This experience marked SNCF strategy for a decade. SNCF’s low debt position can be understood in the light of this past. Nonetheless, it can coexist with heavy debt for Fret SNCF, which is considered a self-standing entity. It is in fact this situation stemming from a series of heavy deficits that triggered a restructuring process for Fret SNCF at the end of 2003.

Altogether, by comparing the information provided by UIC with that presented to our group, three types of situation can be identified for the rail freight operators we visited. In 2006, only Railion reported a clear profit. EWS has been weakened by a downward trend in turnover since 2001. This downward spiral in turnover also affected PKP Cargo’s position, triggering major restructuring at the end of 2008. CFL Cargo, Fret SNCF and Trenitalia Cargo were faced with serious deficits in 2006, with plans to return to breakeven in several years.
MAJOR DOWNSIZING IN STAFF NUMBERS DURING THE RECENT PERIOD
Discussions have understandably been marked by the economic situation of the six operators our group visited. Three cases stood out more clearly from the presentations and discussions held: Railion’s past restructuring, CFL Cargo’s ongoing restructuring, Fret SNCF’s restructuring project.

3.1. Heavy staff streamlining in the rail freight operators visited

3.1.1. The rail freight business was formerly incorporated in integrated railway companies; the new situation generates new risks for employment

The relative novelty of the restructuring situation in European rail freight has already been perceptible for several years, but is becoming increasingly widespread:

- Apart from EWS, the staff numbers of all rail freight operators our group visited were not differentiated in national railway companies still a few years ago. Over a long period from 1970 to 2006, mean annual staffing fell sharply from 4 419 to 2 996 for CFL (i.e. nearly a third of the staff size), from 392 680 to 228 990 for DB despite reunification with the East German railway (i.e. by over 40%), from 190 520 to 98 447 for FS (i.e. nearly half the staff size), from 360 798 to 125 894 for PKP (i.e. by nearly two thirds), from 302 989 to 164 404 for SNCF (i.e. half of the staff size). (“Time series railway statistics.1970-2006. UIC”).

- Today this business is mainly in the hands of separate operators, even though some operators are still integrated in Railway Undertakings. The change taking place is not without an impact on the professional identity of the relevant staff and on the restructuring processes undertaken.

- Increasingly this distinction highlights the specific position of operators. The separation of the accounts of rail freight businesses, the attention the European Commission gives to cross-subsidies and public aid regulations contribute to highlighting this situation. The visibility of the situation in the rail freight business is a phenomenon shared by all operators irrespective of their status (independent company, subsidiary of a group, internal entity within a railway company). This visibility is a strong incentive to undertake restructuring with the objective of restoring a deteriorated economic and financial position.

- The deterioration of rail freight operators’ economic and financial position may be due to stagnation in particular, and even more so to a fall in turnover in a business where the burden of fixed costs is heavy. Under these conditions, the objective repeatedly mentioned during several visits of containing railway competitors share at 75 or 80% is decisive insofar as it points the way to the path of possible growth for the main operator provided the there is global growth in rail freight. The ability to achieve this objective will be depend on many parameters (degree of control of the strategic assets that wagons are, ability or not to maintain the positioning of an efficient generalist, possibility of securing
a springboard for growth on international flows, strategic cohesion, firm resolve and competitors’ capabilities, etc.). It should be noted nonetheless that EWS is already below this threshold in Great Britain (from 85% in 1998/1999 to 67% in 2006/2007) and that PKP Cargo’s market share in Poland is shrinking rapidly (from 84% in 2005 to 76% in 2007) in a trend to erosion of the modal share. Consequently, the opening up of the market to intra-modal competition may render the main operators more vulnerable on national territories, at least during a transition period.

» Performance standards will become widespread through the tendering process among rail freight operators. Some of these standards will relate to employment in the quantitative sense of the term. It can be expected that current differences will tend to shrink. For example, when the staff size and tonne-kilometres carried of the current three main national operators are compared, there is a difference of between 1 to more than 3 between PKP Cargo on the one hand and Fret SNCF and Railion on the other. This type of gap may depend on numerous parameters but in a competitive universe, it is likely that it will not last.

3.1.2. The staff size of rail freight operators has now been clearly identified.

The staff numbers of the six rail freight operators in our sample have been sharply reduced in the recent period.

» PKP Cargo staff numbers, which became identifiable recently (the PKP Cargo company was founded in 2001), have been cut from 47,857 on 1/01/05 to 44,719 on 1/01/07.

» Railion’s staffing fell in less than fifteen years from 32,000 to 21,000 employees. In correcting this trend by transferring the business of heavy maintenance for locomotives and wagons to another branch in the group, staffing was cut by a third.

In most of the cases our group examined, the situation has not stabilised; either restructuring is ongoing (CFL Cargo and Fret SNCF) or further restructuring has been announced (PKP Cargo in 2009 and Trenitalia Cargo which in 2008 announced cutbacks in its single wagonload system in line with what was presented to our group during our visit to Orbassano).

» Fret SNCF staffing fell from 15,130 when the Véron plan was launched at the end of 2003 to 10,520 at the end of 2007, i.e. a cutback of one third of the staff size in four years.

» EWS staff numbers dropped from 8,633 in 1996 to 4,945 in 2008 while this figure includes some 500 employees in France and some twenty in Spain in the enlarged configuration of the company compared with its initial structure. In terms of the same contours, staff numbers have been cut by nearly half in a decade.

» Following the merger between ARCELOR’s transport business and CFL’s freight business, CFL Cargo staff numbers are expected to fall from 531 at the start of 2006 to 381 at the end 2008, i.e. by nearly 30%.
All of the operators considered, therefore, have undertaken restructuring involving substantial job losses long ago or in the recent period. With the exception of EWS, these staff cutbacks were undertaken even while the operators were still integrated in railway companies in various ways or even in company groups. Their situation varies from this standpoint.

The difference can be illustrated by the fact that at the end of 2006, DB Schenker had 35% of the staff of the DB group (including 10% in Railion) whereas this proportion was less than 20% in the SNCF group (including roughly 5% in Fret SNCF).

3.1.3. Staff streamlining rarely resulted in dismissals

Over a short period of three or four years, in particular for CFL Cargo and Fret SNCF, or over a long period of over ten years, in particular for EWS and Railion, the downsizing in staff numbers affected 30% and 50% of the staff respectively. The measures accompanying these staff cutbacks varied for each operator.

These were the subject of negotiations with union organisations. Consequently, in Germany, a pact guaranteeing employment was signed, firstly in 1994. E.g, within DB. Working time was reduced and an internal labour marked was established, in exchange for no dismissals on economic grounds.*

Nonetheless, beyond the differences and disparities, several trends emerge:

» Departures into retirement or early retirement were the main measure used by rail freight operators. In Germany, thanks to State aid, a large number of civil servants took early retirement. This measure was activated especially in the 1990s, but it again affected roughly 300 drivers in 2004. In the recent period, the State has rendered it practically inoperative. A union member in our group emphasised that this measure had become increasingly less attractive, adding that “we were lucky to have completed restructuring in this period”. In Poland, departures for early retirement were used as much as today in France; non replacement of retiring staff contributed significantly to reducing staff numbers at Fret SNCF.

» In-house redeployment in railway companies has been one of the measures most used, in particular by CFL Cargo, Railion and Fret SNCF. The CFL Cargo management emphasised that insofar as the persons affected retain the same status, this did not raise any objections among staff. We add that on the contrary, some persons may gain from this measure if the change opens better career prospects in an entity with more solid dynamics. For Fret SNCF, the in-house redeployment effort was commensurate with the volume of staff reductions over a short period on the one hand, and the specific nature of certain jobs in rail freight. At DB, the redeployment mechanism evolved over a period of time. In 1995, restructuring units were set up in the rail establishments. In 1997, a Service Centre for Labour (DZA) became the main player for the in-house employment market in the DB group. This entity was transformed in 1999 to become DB Arbeit GmbH with a more precise definition of employees’
contribution to their redeployment. In 2001, there was another change with the creation of a placement company, DB Vermittlung GmbH. It then became the DB JobService in 2005. A distinction was then made between:

▷ bearing the cost and placement in the DB group of civil servants and employees benefiting from protection against dismissal;
▷ and bearing the cost for a fixed term and an effort to redeploy persons outside the DB group for employees not benefiting from protection from dismissal.

The succession of bodies in charge of redeployment of surplus employees illustrates the difficulty of the subject to a certain extent. The difficulty is all the greater in that the number employees to be re-deployed reached a maximum of three thousand persons. At the time of our visit, this number was close to zero. The question of redeployment is very different depending on the job concerned. Hence the Fret SNCF regional management highlighted the difficulty of redeploying shunting staff over fifty years of age.

▷ **Voluntary departures** mentioned in particular in Manchester as one of the main measures used along with early retirement. These departures pertained in particular to drivers recruited by the numerous other Railway Undertakings operating in Britain as of the end of the 1990s.

▷ **Other measures** were taken. Railion reverted to in-house cleaning and safety services which had been sub-contracted earlier, thereby enabling in-house redeployment of a part of staff. Conversely, a project to transfer 29 Fret SNCF staff members to the SNCF combined transport subsidiary, Naviland, was presented to our group during the visit at Le Havre.

▷ **Dismissals** have sometimes taken place. This measure was adopted in particular in PKP in the first half of the 1990s. Staff dismissed benefited in this instance from compensation and back-to-work assistance. Furthermore, at EWS, dismissal bonuses, considered “large” by a union member, were granted.

Not all of the measures accompanying staff reductions had the same impact for the staff concerned. From this standpoint, there were four situations as follows:

▷ **change from the status of employee to retiree, be it early retirement or not** (for the staff concerned, the issues arising in this case pertained to whether this change as well as the change of status was accepted or forced upon them),
▷ **continuity in the status of staff members transferred to a different job through in-house redeployment** (for the staff concerned, the issues arising in this instance pertained to whether there were measures accompanying this redeployment),
▷ **extension of the contract of employment for a fixed term with assistance for redeployment outside the company** (for the staff concerned, the issues arising pertained to the conditions connected with this extension, notably in terms of remuneration and the length of the transition period as well as redeployment measures and their effectiveness),

Further measures included:

▷ **transfer of employees to different sectors** within the group;
▷ **termination of contracts of employment** (for the staff concerned, the issues arising pertained to the conditions connected therewith, notably in terms of remuneration and the length of the transition period as well as redeployment measures and their effectiveness).
termination of the contract of employment in the framework of voluntary or forced departure, with the risks associated with this type of situation (for the staff concerned, the issues arising pertained therefore to the amount of compensation received).

3.2. These staff reductions have been an integral part of specific restructuring processes

3.2.1. Railion: a long restructuring process that focused in particular on single wagonloads

German reunification in 1990 triggered a process leading in 1993 to an act on the merger and restructuring of the Deutsche Bundesbahn and Deutsche Reichsbahn companies, followed by the founding of Deutsche Bahn AG in 1994. A public institution, the BEV (Federal Railway Property Office) took charge of property assets, the debt of the two incumbent companies and the staff with civil service status. This meant that as of that date, the State compensated for the gap between the former status of civil servant and the new status under private law.

DB restructuring began at this time. In 1999, the DB AG holding was founded with five self-standing limited companies including DB Cargo AG for freight. At that time, Railion undertook an analysis of its business portfolio and found that it achieved break-even for 95% of its turnover, generated by 11% of its customers whereas 5% of the turnover produced for small customers was loss-making.

A restructuring plan called Mora C (market-oriented freight transport product) was launched. The plan, based on simplification of the single wagonload production system spanned a period of four years, from 2000 to 2004. The number of stations served for freight was streamlined from 2400 in 2000 to 1440 in 2003. Railion offered substitute solutions to the shippers affected:

- either by organising the service to another station,
- or proposing that the service be provided by a regional rail freight operator,
- or by transferring conventional freight to combined transport,
- or by switching to road through a Schenker subsidiary.

Altogether, the Mora C plan led to abandoning less than 10% of Railion’s single wagonload turnover. Doubtless the turnover not absorbed for lack of suitable capacity should be added to this, as was the case after the storm which swept across western Europe creating in its wake strong demand for transport of timber.

This plan was prolonged through two other projects, PAP and 2000 X. The 2000 X project led to a move from the regional organisation of the single wagonload system to concentrating single wagonload operations in fifteen, and subsequently ten cargo centres (from north to south, Hamburg, Berlin, Hanover, Halle, Hagen, Duisburg, Frankfurt, Nuremberg, Mannheim and Munich). The PAP project focused on management of trainloads which were regrouped, including for train drivers, in seven structures (North at Hanover, East at Berlin, West at Duisburg, Southeast at Halle, Centre at Frankfurt, South at Munich, Southwest at Karlsruhe).

Altogether, in 2007, on completion of a restructuring process that took thirteen years, Railion’s staffing numbered 21 000 persons, including roughly 9 000 working directly in the single wagonload system.
3.2.2. CFL Cargo: a relatively short founding and restructuring process

In the early 2000s, CFL’s freight business employed 600 persons (which management considered were not surplus staff) and generated a €30 million deficit for €90 million in turnover. According to the current CFL Cargo management, this deficit was due to the gap between the costs of a service three quarters of which consisted of single wagonloads, and prices aligned with road transport. Since Arcelor, its main customer refused to accept a roughly 25 to 30% rise in the cost of rail transport which would hurt its competitiveness, there seemed no way to resolve the problem.

The merger between the CFL Freight Department (a 250-kilometre rail network) and the in-house Transport Department of Arcelor Mittal Luxembourg (a 150-kilometre rail network) was seen by all parties involved as the best solution. In the face of the risk of closure of the CFL Freight Department or Arcelor possibly creating a rail freight company, the social partners accepted this merger, as a union member in our group explained.

CFL Cargo, two-thirds of which are owned by CFL and a third by Arcelor, was founded on 17 October 2006 with the objective of “creating a profitable company providing rail transport at a tariff below that of the main road transport competitor”.

The job streamlining on which the business plan was based was warranted by the introduction of new locomotives (on one hand remote-controlled locomotives and on the other, more powerful locomotives to haul trains with one locomotive instead of two), by optimisation of the work organisation as well as by introduction of multi-tasking. Staff numbers were cut to 466 persons at the end of 2007.

According to management, at the time of our group’s visit, restructuring and its impact on employment were considered as not yet finalised. The brevity of the restructuring process should be associated both with the fact that it was not completed and to the small size of CFL Cargo.

3.3. Restructuring has been or will be carried out in different ways

3.3.1. Railion negotiations

Railion’s lengthy restructuring underwent regular negotiations. There was a succession of several restructuring models, notably as legislation evolved. Altogether Railion’s restructuring has been described as painful by a union member in our group. Its human impact had serious consequences on career paths bearing in mind that some persons have experienced four, five and even six reorganisations. The same member of the group also emphasised that although
this restructuring gave rise to difficulties in the production process due to “loss of know-how” because of the departure of highly qualified persons or due to working conditions because the workplace was far from home, the fact that it has led to Railion’s recovery and that it now seems to be over is a good surprise.

What can we learn from this assertion?

» There is a link between job prospects and growth in rail freight’s modal share observed in Germany. This does not mean that there is a mechanical and immediate link between the two, but, as the director of ECR emphasised in his talk to our group, referring to his own experience in Canada, in the medium term, the link between the modal share and jobs is strong.

» Based on the German example, another link can be established between improvement of organisational efficiency, rail’s modal share and jobs. When Trenitalia Cargo told our group that it was facing a terrible equation of a cost per tonne-kilometre of 19 € for a price charged of 14 € whereas competitors offered a price of 12 € for a cost of 9 €, the economic dimension revealed its full importance.

» Railion’s example shows that performance improvements are not necessarily synonymous with social dumping and can accommodate a negotiated process.

The German example is the only one to date illustrating a favourable link between improvement of the main rail freight operator’s performance on a territory, gains in the modal share and stabilised employment prospects.

This does not mean that the organisational choices made are the most satisfactory ones, nor that they are optimal or that they must be duplicated elsewhere.
3.3.2. Social dialogue with a tripartite negotiation for CFL Cargo restructuring

The tripartite, a “tool” created in the 1970s to clarify important social points of national interest, in which government, union organisations and representatives of the business sectors take part, was activated in 2005 to attempt to find a national solution to CFL’s freight business problems. During our visit in Luxembourg, a staff representative mentioned the fact that union organisations had accepted that CFL Cargo be created in the absence of a credible alternative and recalled the lengthy tripartite negotiation (State, Senior Management, Union Organisations) culminating in an agreement on 20 December 2005.

It is in the framework of the tripartite that negotiations took place to make advances in the working conditions of the staff of the new company, CFL Cargo. A balance was sought between management’s resolve to align these conditions with the private sector and the concern of union organisations of preserving specific benefits.

On 6 June 2007, the social partners finally signed an agreement on working time and rest time, which took effect on 1 October 2007, based on the following rules:

- **For ground staff**
  - Length of the work day: 24 hours/day in several shifts
  - Driving time: from 6 to 9 hours per day including a break after 5 hours of driving
  - Maximum driving time: 9 hours in daytime, 8 hours at night
  - Maximum driving time over 2 weeks: 80 hours
  - Duration of shifts: maximum 10 hours in a daytime shift, maximum 8 hours in a night shift
  - Maximum daily working time: 14 hours if the driver returns to his home base by a light running passenger train

- **For train drivers**
  - Length of the work day: 24 hours/day in several shifts
  - Driving time: from 6 to 9 hours per day including a break after 5 hours of driving
  - Maximum driving time: 9 hours in daytime, 8 hours at night
  - Maximum driving time over 2 weeks: 80 hours
  - Duration of shifts: maximum 10 hours in a daytime shift, maximum 8 hours in a night shift
  - Maximum daily working time: 14 hours if the driver returns to his home base by a light running passenger train

In the framework of the reorganisation of working and rest time, the unions managed to preserve a rest time spanning 2 consecutive nights, maintaining rest time at 14 hours and gain abandonment a shorter weekly rest time reduced from 38 hours to 24 hours.

Before the agreement, work was organised as follows:

- From 6.00 am to 12.00 noon: 6 hours of work; from 12.00 noon to 8.00 pm: 8.00 hours of work; from 8.00 pm to 6.00 am: 10 hours of work
- Number of working hours per week: 40 hours
- 8 hours of daily rest as the minimum limit
This minimum limit for rest time was to the advantage of both management and union organisations because it allowed for greater flexibility and at the same time for longer rest periods (often 3-4 days in a row).

By contrast with its neighbours and notably Germany, the daily 8-hour rest period when away from home is authorised in the railway sector, which has always been criticised by the labour inspection agency.

The special retirement regime for railwaymen with public sector status has been abolished: it set the retirement age at 60, at 57 for employees with 20 years of seniority and at 55 for train drivers, shunting staff and employees with over 25 years of seniority. The retirement regime has been aligned with that of the private sector: the retirement age has been raised to 60 for everyone except persons with 20 years of seniority in the company and those who have contributed to the social security system for 40 years, who can benefit from early retirement at the age of 57.

Where salaries are concerned, union organisations recognise the good salary level of Luxembourg railwaymen, but criticise management’s attempts to lower remuneration whereas it is increasing requirements.

**CFL Cargo restructuring illustrates the need to prepare changes such as these, to present a cohesive project, to discuss it openly and to amend it in order to adapt to the situation, to negotiate its impact on staff, to take time for negotiation.**

### 3.3.3. A project for changes in labour regulations which was in the pre-negotiation stage in Fret SNCF

According to Fret SNCF regional management which was present at Le Havre during our group’s visit, the constraints due to social regulations on working and rest time are a source of substantial additional organisational costs which have become problematic with the opening up of railway competition. The conditions of use of train drivers in particular (this is less the case for sedentary staff) are so rigid and complex that they are no longer adapted to proper use for the freight business.

According to management, the mean length of the work year for train drivers is 1100 hours whereas the regulations allow for 1500 hours. More precisely, Fret SNCF management told our group that it was difficult to use staff full time on the basis of current conditions governing working hours because of these constraints. The current length of the work day as defined in regulations is 11 hours. In practice, the mean time worked by staff was said to be 5_ hours.

Hence the problem is not the length of the work day, but the actual working time imposed by time constraints in the regulations. Management mentioned the following examples:

- A driver can not resume work on Monday morning before 6.00 am if he has worked on Friday evening, which means that Fret SNCF is forced to refuse traffic or to use more drivers.
The regulatory constraints make continuous night work difficult. For example, the “7/5/2” rule prohibits train drivers who have done at least two hours of driving during the middle-of-the-night period (0.30 am / 4.30 am) from working more than 7 hours long and driving more than 5 hours.

Altogether, the work organisation is not suited to managing the unexpected (5% of traffic). The Fret Normandie management had to set up a pool of mobile train drivers paid accordingly and on a volunteer basis because it is difficult to handle unexpected events without agreements on derogations (complex negotiations) and to organise a “production guarantee” (safety margin) in the framework of current labour regulations.

While the unions emphasise the short length of the rest period away from the place of residence (9 hours), management points out that today 60% of rest time is doubled (2 x 24 hours +14 hours) for line drivers. It considers that production flexibility would be enhanced with 30-35 hour rest periods.

Management’s objective is to optimise staff deployment while complying with the current employment code, and to abolish these regulatory time constraints no longer adapted to the rail freight context. Hence the regulations must be made more flexible in the forthcoming social negotiations especially since, according to management, train drivers complain frequently about how these constraints are applied in the day-to-day context.

The restructuring project presented at our visit at Le Havre did not include the global dimension of the restructuring process analysed afterwards in Hamburg nor the system being implemented in Luxembourg. Discussions with our group highlighted the importance of a shared diagnosis.

The productivity gains stemming from more flexible labour regulations would be shared with employees. The latter would benefit immediately from better pay thanks to improvements in organisation.

Furthermore, it would be advisable for management to enhance the level of train drivers’ remuneration in the freight business to take better account of the strenuousness of the job. Today remunerations are identical irrespective of the business sector.

Certain union organisations have indicated that they would be prepared to consider changes in the “RH077” regulation but in exchange for financial compensation, compensation in time or in career development. At the meeting with our group, all union organisations criticised the current insufficient social dialogue and implementation of reorganisations decided unilaterally: delocalisation of staff, specialisation of staff in certain tasks.
TOWARDS A NEW STRUCTURE?
The consequences of this restructuring for the undertakings concerned and their staff were underscored by management and union representatives during discussions with our group, in particular in Germany, France and Luxembourg.

4.1. Restructuring has created difficulties of various types for staff remaining in the undertaking

4.1.1. Tension regarding the balance between private life and working life

In 2001 in Germany, the collective labour agreement on working hours, the duration of working time, work assignment conditions, minimum rest time, and weekend rest was modified to comply with standards recommended by the CER and European Union directives. According to Railion management, the flexibility introduced on this occasion generated considerable productivity improvements for passenger and freight transport, notably in terms of transport times. For example, if a train suffers a lengthy delay, the driver can work longer than his normal hours. Nonetheless, where lengthy delays are recurrent (notably at border points with Poland), setting up a dedicated pool of standby drivers makes it possible to avoid recourse to overtime. Thanks to this mechanism for managing unexpected delays, there are practically no nights spent away from home base. Railion management added that setting up a more productive system similar to that in France would generate nights away from home base.

Unionorganisationemphasisedthedeterioration in working conditions. They criticised in particular the move to greater flexibility in the duration of working hours which tended towards persons being permanently available. This would result in abolition of the person’s private sphere, greater psychic pressure and a problem of “job vagrancy”. As a result, some train drivers would leave home for a week and not know exactly when their service assignment would end. At the same time, concentration of activities at a very small number of sites had generated long journeys and had also reinforced the phenomenon of mobility among a large number of employees. For all these reasons, the company had become less attractive, especially for young people.

During the discussions which took place during our group’s visit in Hamburg, management recognised the right to respect and to protection of employees’ personal lives, while at the same time reasserting the requirements for irregular hours. It considered that better planning of production should make it possible to reduce the adverse impact of these contingencies.
4.1.2. New occupational demands

At EWS in Great Britain, the train driver population has fallen from 2,700 in 1997 to 1,850 in 2007. The reason for this sharp drop is notably the renewal of the locomotive fleet which has made it possible to shift from double manning to single manning at the head of freight trains. Another element, recourse to overtime, has contributed to making this reduction possible. Train drivers work theoretically 169 days per year calculated as follows:

$$46.2 \text{ weeks} \times 35 \text{ hours/week} = 169 \text{ work days /year}$$

$$7.6 \text{ hours/day}$$

The duration of work for a driver can vary between 35 and 48 hours per week and must comply with the rest time specified in the European Union directive. In reality, the mean effective work time of a train driver is 42 hours/week. Under the terms of the agreement signed between management and the unions, there is no extra pay for work beyond 35 hours. However, if a driver has not worked the number of contractual hours, he will not be debited those hours not worked. A union representative referred in this respect to “an overtime culture” among EWS train drivers.

Another development for drivers has led to a reduction in ground staff numbers. EWS drivers have in fact become multi-tasked. As a union representative emphasised during our visit to Manchester, a driver is “responsible for his train today. He prepares it, does a bit of maintenance, and looks after fuelling”. He ended his comments emphasising that this was a “huge change in working conditions”. A management representative pointed out that drivers now did “a full run”. In exchange for this change in the context of heavy demand for drivers on the labour market, union organisations had obtained large salary rises. Consequently, the base salary had increased 242% from 1996 to 2007, and further advances were announced for a period a few weeks after our visit.

It can generally be considered that the large reduction in the number of supervisory staff at EWS based on the model of North American company practices, generates new requirements and responsibilities for staff.

The EWS example prompted focusing attention on drivers. The new professional requirements generated by restructuring can also be addressed with respect to the personal effort, at times considerable, which may accompany professional redeployment.
4.2. Restructuring has given rise to problems in human resource management in undertakings...

4.2.1. Loss of know-how, a risk of demotivation and difficult management of the age pyramid

As mentioned on several occasions in our group’s meetings, restructuring on the scale that occurred at Railion causes social traumas. This happens to staff forced to leave their job, but it can also affect those who remain in the company and have to deal with one or more mobility constraints, and whose motivation or professionalism can be diminished, whence the particularly decisive importance of human resource management in these periods.

These issues mentioned in connection with Railion apply to all restructuring. They were formalised in more depth in Hamburg notably because Railion’s restructuring took place earlier than restructuring elsewhere.

Because staff cutbacks have often been associated with early retirement, there has been a resulting loss of know-how. The same effects occur when skilled staff choose to change employer. This phenomenon is new in the rail freight sector, while it is true that it is not occurring on a broad scale. By contrast with lorry drivers, international mobility is only a marginal part of this process. In this respect, CFL Cargo management, when faced with major difficulties to recruit skilled staff, announced that it happened that they recruited French or German staff. A union representative stated that if this staff was not perfectly bilingual, they could not “be used on all routes”. Nonetheless turnover of skilled staff can become a problem. For example, the Director of ECR told us that about half of the staff of this newcomer operating in France was from SNCF. PKP Cargo management was more reassuring on the subject for incumbent operators because it noted a trend for drivers who had left to work to go to newcomers to return subsequently. It considered that this trend was due to issues connected with observance of regulations.

When accompanied by large staff reductions, restructuring results in major organisational changes and radical changes in practices. This leads to changes in professional references. In some cases, the change is kept under control and can lead to efficiency improvements. In others, the lack of control can be accompanied by problems of tension, risk of demotivation and excessive stress. A union representative in our group repeatedly emphasised this dimension of restructuring, the resulting intensification of work and the consequences of this intensification which he saw in his day-to-day work of staff representative.

Mechanically, the periods of sharp job reductions are accompanied by absence of recruitment. When such periods last, they lead to an imbalance in the age pyramid. PKP Cargo management mentioned the difficulties caused by the absence of recruitment in the 1990s, leading today to a “generation gap”. This gap causes difficulties in particular to transfer experience from one generation to another. The generation imbalance occurs especially when a period of massive departures into retirement has not been foreseen sufficiently and in addition is combined with a period of shortage in the category of staff needed.
Restructuring involves obvious economic challenges. One of the lessons learned from our group’s work is about driving the process of restructuring. Indeed, the quality of driving this process is decisive for the success or failure of the project. Preparation of a coherent, pertinent and appropriate project is merely a first stage. Driving the process of restructuring pertains both to the mechanism for discussion / consultation / negotiation in practice, but also the arrangements for human resource management.

4.2.2. Risks of shortage of qualified staff

In our group’s visits, the question of recruitment difficulties was addressed several times. This issue may seem paradoxical at a time when staff reductions are a common characteristic among the six operators in our sample. The issue is more complex:

- Elimination of certain jobs on certain sites and in certain regions can occur while at the same time there is a shortage in other jobs. During our visit to Luxembourg, management emphasised the shortage of locomotive drivers for both CFL and CFL Cargo at the very time the new rail freight operator was in the midst of restructuring. At the end of 2007, new recruitments were required to remedy this shortage.

- In a recruitment process, the timing is important: the timing of the decision more or less anticipated, the timing of selection, which is more or less long, the timing of training, which varies depending on the job skills. The shortage of drivers was stressed by PKP Cargo management. In fact, the recruitment process is a period taking months even years (in Poland in particular) for a train driver and only days for a lorry driver. Hence planning ahead plays a decisive role. CFL Cargo also raised the problem. Management emphasised that the difficulty of planning and the lack of anticipation of staffing needs on the one hand and the length of railway training on the other generated relatively long periods of shortage. According to union organisations, these shortages resulted in overwork for the staff in place: drivers are therefore unable take their leave as planned. Conversely, EWS management chose to conduct a massive recruitment campaign of drivers in 2003, thereby reducing the mean age of the train driver from 50 to around 40. A British union representative stressed in this respect that EWS had “done a good job of it” since it had not been necessary to recruit “for at least five years”.

- A short or medium term projection can prompt some operators to think of stabilising employment which calls for a substantial recruitment effort to offset departures for retirement. Railion is the only operator in our sample to be so precisely in this situation. During our visit to Hamburg, Railion management admitted that they should have anticipated this question 10/15 years earlier because...
today, there are not enough young people to be trained and the only solution in the short term is to delay retirement of ageing staff. Railion management went farther and said that this was a subject of concern linked with a largely European problem of demographic ageing and which should be addressed at policy level because the entire sector is or would be faced with the problem.
THE CONCEPT OF SHORTAGE. APPLICATION OF THE CONCEPT TO THE ROAD FREIGHT SITUATION IN FRANCE

Manpower shortage can be defined with reference to the availability of a job skill, a profession or a set of competencies depending on the employment conditions proposed in specific time frames and on a particular territory. In several European countries (Germany, France, Poland, Sweden), road carriers have difficult in recruiting young drivers. The rationale of shortages can be understood from a close analysis of the situation in France.

1. a demographic shortage of drivers which could have been anticipated (a mean annual rate of departures into retirement of less than 2 000 persons in the mid 1990s to roughly 4 500 in the mid 2000s).

2. This shortage is greater in the south of France than in the north (stronger growth, but a higher rate of departures into retirement).

3. The demographic origins of the shortage are accentuated by the fact that the profession of driver has become less attractive, especially because it is a strenuous job.

4. This shortage is all the more sensitive in that two thirds of recruitment requirements in road freight transport companies arise “immediately” and as a general rule, recruitment is done “within a few days”.

It should be said drivers’ international mobility has an impact on shortages in some countries. Spanish companies faced with an ageing driver population have recruited workers from Latin America, Bulgaria and Romania. Conversely, many Polish drivers, attracted by better salaries, have gone to work in Great Britain and The Netherlands.

The shortage in qualified staff has proved to be a complex question involving a variety of situations depending on the region, job skills, conditions connected with performing these jobs, the status of staff, etc. and hence probably calls for specific analyses and management methods.

4.2.3. ... and new problems underscoring the need for negotiations to arrive at a solution: the status of staff as a result of closer ties between companies

The merger between the CFL freight entity and the Arcelor in-house transport business led to the coexistence of three statuses: a status of railwayman for CFL staff, a status of steel worker for Arcelor staff and a private status remaining to be defined for staff now recruited by CFL Cargo. At the time of our visit in September 2007, staff numbers totalled 468 persons, 343 of whom were under CFL contract, 92 under Arcelor contract and 33 under CFL Cargo contract. We were able to see at the site how complicated this situation was to manage and how it could lead to difficult negotiations. The CFL Cargo director recognised furthermore that this was a “difficult transition phase” generating tension. As expected in this type of situation, the merger generated a large amount of work to compare certain jobs existing in the two original entities.

Similar difficulties can be imagined, with an additional degree of complexity when a company is integrated into another firm of a different nationality as was the case recently with the takeover of Railion Danemark staff by Railion Scandinavia, newly created by Railion and Green Cargo.

Similar difficulties can be imagined, with an additional degree of complexity when a company is integrated into another firm of a different nationality as was the case recently with the takeover of Railion Danemark staff by Railion Scandinavia, newly created by Railion and Green Cargo.

Negotiations are imperative in this type of situation.

We can see to what point, in the cases examined by our group, the concepts of consultation and negotiation are decisive to undertake change. These concepts apply differently from one country to another depending on existing regulations and the practices in force. It is easier to implement them when the changes have been anticipated especially since this leaves time for the consultation and negotiation mechanisms to be undisturbed by the pressure of urgency. The fact of negotiating the mechanisms themselves can contribute to initiating practices adapted to specific situations and circumstances.
III

AVENUES FOR GROWTH AND MAJOR CHALLENGES FOR THE WORKFORCE
The uncertainties in the price of petrol, the growing importance of environmental issues and the increasing need for multi-modality are creating a more favourable context for rail freight development in Europe. Nonetheless, this does not mean that European rail freight will automatically experience the same dynamics as intercontinental maritime transport and European road transport over the last thirty years. Growth in European rail freight would imply an increase in its modal share, especially in the short term given the current economic situation. The impact of the crisis could indeed be a reduction in the volume of goods carried and the distances worked as a result of the deterioration in economic prospects in Europe and more unpredictably, relocation of certain economic activities.

The trend towards marginalisation of rail freight led some observers to voice doubts a few years ago about the durability of this mode of transport in Europe. Rail passenger transport has been able to regain ground in passenger transport and benefits for this from the extension of a high speed rail network and from favourable trends in regional and metropolitan transport. In the world of rail freight, there has not been any modernisation impact to date on the scale of high speed rail for passenger transport. The investment effort in rolling stock, in information systems, and in staff training implies generating an internal financing capacity which in turn implies an increase in turnover. From this standpoint as well as from the standpoint of public authorities’ perception of rail freight performance, the modal share remains a decisive criterion although it is not the only one. What have we found on the subject in the six countries examined here?

With a modal share of 26% in 2007, Poland remains of course well above the average in Europe, but is quickly getting closer to it, with a pace of decline of roughly 2% per annum over the last ten years despite a still small amount of motorway infrastructure and severe winters which are more to the rail mode’s advantage. Another sign causing concern is that France, with a 15% modal share, has lost 5% since 2000 thereby scoring the average in Europe. In two other countries which the joint European group visited, the United Kingdom and Italy, the rail freight share is low, in the order of 11%. In Luxembourg, with a modal share of 3%, rail freight has become marginal.

In fact, in our sample, Germany stands out as an exception, with the rail share of domestic freight transport growing regularly since 2002 to 22% in 2007. This exception is well worth attention since it underscores the potential for rail freight in Europe and prompts questions about the conditions for achieving this recovery.
Trend in the rail freight modal share per zone (in billion tonne kilometres)

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<tbody>
<tr>
<td>Germany</td>
<td>19.0%</td>
<td>18.2%</td>
<td>17.9%</td>
<td>20.3%</td>
<td>21.4%</td>
<td>21.9%</td>
</tr>
<tr>
<td>France</td>
<td>21.0%</td>
<td>20.6%</td>
<td>19.0%</td>
<td>16.0%</td>
<td>15.7%</td>
<td>15.1%</td>
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<tr>
<td>Italy</td>
<td>10.8%</td>
<td>11.0%</td>
<td>9.6%</td>
<td>9.7%</td>
<td>9.9%</td>
<td>10.7%</td>
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<tr>
<td>Luxembourg</td>
<td>13%</td>
<td>7.9%</td>
<td>5.7%</td>
<td>4.1%</td>
<td>4.6%</td>
<td>2.8%</td>
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<tr>
<td>Poland</td>
<td>54.0%</td>
<td>42.2%</td>
<td>37.0%</td>
<td>30.8%</td>
<td>29.4%</td>
<td>25.5%</td>
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<tr>
<td>United Kingdom</td>
<td>8.3%</td>
<td>9.8%</td>
<td>10.2%</td>
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<tr>
<td>15-Member EU</td>
<td>15.3%</td>
<td>14.9%</td>
<td>13.9%</td>
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<tr>
<td>27-Member EU</td>
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<td>19.5%</td>
<td>16.1%</td>
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N.B.: for Germany, data pertaining to the years 1970, 1980 and 1990 includes the German Democratic Republic
Source: Eurostat. 2007 Statistics

The first two parts of this report have focused on the difficulties and risks prevailing, and the implications posing problems for staff. The last part of the report considers the situation from another standpoint, that of the potential and the conditions for this potential to materialise in the medium term, and the implications these prospects can have for staff.

The work done by our group revealed the disparity in the situations and strategies adopted. A certain number of problems are shared by all. The solutions adopted in response to them depend on the initial situations and singularities specific to each operator.
CONDITIONS FOR FREIGHT GROWTH ON BOTH THE INTERNATIONAL AND DOMESTIC MARKETS
Railion is the sole operator our group visited which presented prospects for job stability over the medium term. The recovery of the modal share established recently is a solid basis for these prospects.

5.1. European rail freight has a high potential for growth

5.1.1. Development of ports: a stronger role for the rail mode, a prerequisite

The ports can be origin or destination points for all types of freight trains. The port area and any sites linked directly and with frequent services to maritime ports, dry ports such as Duisburg or to a manufacturing plant’s terminal facilities, are strategic areas for rail freight operators.

The visits of the ports of Hamburg and Le Havre highlighted the fact that, beyond the initial situation, development of port traffic henceforth depends of necessity on building up rail freight. Consequently, the choice between one route or another will be made increasingly not merely between two ports, but by comparing two transport chains. Among the numerous variables involved in this choice, overland carriage to and from the ports has become of strategic importance. Let us look more closely at this point:

- On average, beyond fluctuations in the economic situation, the cost of overland transport accounts for roughly 40% of the total cost of transport of goods from the place of production to the market place.
- The quality of the interface between maritime and overland transport is a cost element and an element of the relevance of the service which counts in smooth transit through the port, but also in management of documents (identification, customs clearance, insurance, etc.).
- Transit time reliability, trip frequency, payload capability and price are the decisive elements in the performance of land-based services.
- The expanse of the hinterland is decisive for a port’s positioning. For numerous reasons, road transport, which is clearly relevant for short hauls and for multi-drop traffic, is not a sufficient vector to ensure the influence of a port for distances of over 500 km.

Indeed, the orders of magnitude between Hamburg and Le Havre are in no way comparable, but in both cases, ambitious plans for development were presented to us. The prospects for development mentioned during our visit in Hamburg would translate into an increase from 200 trains per day in 2007 to 400 in 2015 in a context of strong growth in port traffic (from 135 million tonnes in 2006 to 222 million in 2014). And the investments announced to modernise the railway network and eliminate bottlenecks in order to create the conditions for this build-up of rail freight in the port of Hamburg total € 530 million.
The rail mode’s positioning is far more modest at Le Havre (25 trains per day in 2007) and the objectives consist of achieving a modal share of 20% at the 2015/2020 horizon. Here too, large investments in the rail network have been announced, notably to create a new better located marshalling yard equipped with 1 000-metre-long electrified tracks. The obstacles that have to be overcome to achieve a rail freight recovery at Le Havre, however, situate the key points for curbing the rail mode’s marginalisation in the ports and may be relevant on a broad scale:

- **Quality railway infrastructure** (i.e. the condition, location and configuration of lines and marshalling yards) to provide high capacity rapidly for removal of goods from the port, which is an increasingly important parameter because port sites are tending to become saturated.

- **Multimodal hubs** with direct rail links to port sites to facilitate removal of goods and encourage expansion of a port’s hinterland.

- **Smother flows in administrative management**, for which the main part of processing could be done at a hub relatively near the port in order to minimise congestion in the port area.

5.1.2. A potential to exploit in intermodal transport which is likely to expand.

Combined transport can mean notably for rail freight the fact of conveying maritime containers to or from a port, or forwarding mobile intermodal units on overland, continental or even intercontinental journeys. Intermodal hubs generally have a primarily technical dimension. In the field of maritime transport, setting aside the current crisis and any of its medium-term implications, forecasts predict that the recent period will continue. **Global container traffic, the most dynamic segment of maritime transport, is expected to grow from 129 million TEU in 200 to 371 million TEU in 2020.** These dynamics are based both on growth in international trade and on expansion of containerisation of goods. Containerisation is expected to spread on the one hand on a territorial scale, with the rate of containerisation on a comparable basis totalling 80% in the United States, 75% in Europe, 50% in China and at a lower rate in India, and on the other hand, with a change in the basis since new products will be able to be conveyed by container ("La conteneurisation des marchandises conventionnelles et en vrac" [Containerisation of conventional and bulk goods. ISEMAR. Note de synthèse. No. 88. October 2006]).
Combined transport is the type of forwarding where rail transport can already position itself, continuing onwards from intercontinental containerised maritime traffic and in this capacity, be an alternative to road haulage for certain continental traffic.

The organisational handicaps that have to be overcome are considerable:

- **A system of composite customers.** In overland services connecting with maritime transport, the customers are shippers or forwarding agents on the one hand, and ship owners on the other. For continental services, the customers are shippers, transport brokers and carriers.

- **A complex production system,** involving road operators, rail freight operators, combined transport specialists (Kombiverkehr, Hupac, Cemat, etc.) and possibly terminal operators.

- **Combined transport is compared directly with an end-to-end road haulage solution.** The added cost generated by transshipment in yards must be offset by rail transport efficiency. This added cost varies depending on the efficiency of the terminal. Tracks less than 750 m long (as we saw at Bettembourg, Le Havre and Orbassano) require additional work to split up trains. Short-haul road transport can be relatively more costly than an equivalent portion of a long-haul service.

- **Rail transport must use speed to compensate for the time lost in breaks of load** (following road cartage before and after rail transport). Forwarding reliability is the pre-requisite for successful delivery to yard operators and road hauliers.

- **The lack of standardisation of load units causes further delays in intermodal operations and transaction costs.** It should be noted in this respect that the European Commission has taken the initiative of proposing European standards.

Nonetheless, the initial results of the study carried under the Diomis project led by UIC, announce that non-accompanied combined transport traffic may double between 2005 and 2015. From this standpoint, the railway projects running behind schedule for the trans-European transport network are all the more a source of concern since, according to the Diomis report, between now and 2015, bottlenecks are anticipated in North Sea ports, on certain routes, (for example Hanover /Ludwigshafen and the Rhone Valley), at certain hubs (Basel and Ile de France) and in certain regions (northern Italy and the Ruhr).

5.1.3. Abandonment of single wagonload traffic: a strategic deadlock according to CFL Cargo

The single wagonload business is symbolic of how rail freight can be a transport organiser for national and international transport. The business of transport organiser can lead rail freight to operate similarly to the American short lines, with anchorage in a specific territory and/or extending services by offering associated logistics services.
CFL Cargo management has stated clearly that the fact that this rail freight operator considers the abandonment of single wagonloads as a strategic deadlock is based on several arguments, namely:

» Ceasing this business does not mean that all associated costs are eliminated, since part of these costs is then transferred to other businesses.

» In the same way that the port of Hamburg describes itself as a universal port, incumbent operators can be considered as generalists competing with specialists in intramodal transport. To abandon a business of this size is to deprive the company of a strategic difference and place the company on the same footing as the specialists who are more proactive.

» There is a demand on the part of industries for this type of traffic as Arcelor has clearly indicated to its local customer in Luxembourg, CFL Cargo. This means on the one hand that incumbent operators can not ignore the needs expressed by their largest customers, and on the other, that demand by industrial firms has to be met by an industrial organisation.

» Roughly half of current European rail freight traffic is carried in single wagonloads. Abandoning this traffic would be to the detriment of rail freight’s modal share and hence the operators’ credibility with public authorities. The stakes are all the more important for CFL Cargo in that three quarters of its business consists of single wagonloads at present.

The solutions to the difficulties encountered with single wagonloads are varied as seen during our group’s visits. We have chosen to highlight the solution presented by CFL Cargo since it was expressed very clearly in response to strong demand from its main shareholder and customer.

The message in the arguments presented by CFL Cargo management is that single wagonloads hold potential for profitable development on international routes (distance is therefore considered a decisive criterion in the economics of single wagonloads). Investment and running costs for a networked product are such that there is no relevant competition. Therefore cooperation between Railway Undertakings should prevail in this field. This is what UIC recommended in its 2006 annual report.

Continuing on from this view of the future for the international dimension of single wagonloads, a project called X Rail has been devised by six European rail freight operators. It consists of setting up an international network for single wagonloads between industrial centres by 2009, with one service per day on average and with guaranteed transit times.

Some observers think that rail freight’s future in Europe no longer lies in mono-customer trans-European or domestic high-tonnage trains, but in the ability to generate, organise and possibly co-produce multi-customer, multi-product trains on different geographical scales. The X Rail project can contribute to promoting this approach. Other changes may contribute also, such as, for example reflections on how to capture traffic in a local territory. It is ultimately a question of finding a European solution similar to the experience of the American short lines.
5.2. European rail freight growth depends on relative improvement in performance

5.2.1. Conditions for improving rail's positioning in ports

The ability to remove goods quickly and the possibility of reaching out over a long distance are among rail freight's prime qualities in ports. For the interface to be smooth, the railway activity has to be permanent. In Hamburg, with the exception of two or three days a year, it functions daily around the clock. At all events, rail transport has assets enabling it to position its business as an extension of maritime transport:

» The ability to ensure continuity for goods already bundled, either in containers or in bulk.

» A removal capacity in no way comparable with that of road transport and all the more appreciable since space in the port area is becoming scarce.

» The ability to expand the hinterland of ports in different directions and at different distances if a port has a rail link to multimodal hubs.

» The ability to escape road congestion which is problematic at times.

It will be possible to capitalise fully on these assets only if a certain number of conditions are met in the comparison with road haulage in the field of cost, administrative formalities, etc.

To meet the challenge of improving performance so that this potential can materialise, but also to facilitate absorption by railway infrastructure of this increase in volumes carried, combined transport must use levers tried and proven in maritime transport:

» physical performance: the quality of the train path (high average speed, arrival at the receiving yard at a suitable time), the effective payload (length and load) of trains and their load factor; these two dimensions of rail freight performance call for good quality infrastructure;

» the quality and cost of interface: automation of loading and unloading operations, a smooth flow on the “last kilometre”; bearing in mind that depending notably on the size of a hub, the organisational models devised to provide this smooth flow at an acceptable cost by comparison with an end-to-end road transport solution, can vary;

» service reliability: according to the UIRR, in 2006, slightly more than half of combined transport trains in Europe were less than thirty minutes late on arrival. It should be emphasised in this respect that for freight trains in a transport chain, the forwarding speed and arrival on time are decisive criteria. The question is different for freight trains forwarded directly to a shipper; here it is more important that the solution be adapted to the customer and be interactive.
Irrespective of the changes ahead in freight transport demand, containerisation and intra-Community trade seem to be solid processes holding prospects for growth in combined transport provided that the latter meets the performance challenges facing it.

5.2.2. Conditions for development of single wagonloads

What are the conditions for a recovery of single wagonloads in the light of CFL Cargo and Railion experience?

- More industrialisation

- Optimise use of resources:

  - Optimising the use made of resources calls first of all for being equipped with the competencies needed to organise single wagonloads. In this respect, it was noted that the port authorities at Le Havre emphasised the need for rail freight operators to have comprehensive know-how about train formation in order to facilitate removal of goods that may come from several terminals and be headed to multiple destinations.

  - Optimising use of resources consists also of reducing unit costs by the usual means of economies of scale. Concentration of train formation in a small number of automated centres (whence reductions in the workforce) is a first example of this optimisation. Physical productivity gains generated notably by the volumes carried by train are another example. Consequently, Railion has switched from 700-tonne trains to 1000-tonne trains, aims to achieve the goal of 1100 tonnes in 2008 and to move on to 2000 tonnes over the medium term. In early 2007, 835-metre long, 2300-tonne trains were tested between the Maschen marshalling yard and Ringstad station in Denmark.

- Master complexity and/or simplify processes:

  - The single wagonload organisation calls for a network management. Mastering complexity requires a system of robust, punctual and smooth-running trains with high load factors and operated continuously round the clock. By way of illustration, a wagon stays in a marshalling yard like Maschen no more than 4 to 6 hours. A well-managed network yields economies of scale when it is used intensively. Any under-utilisation or any weakness generates cascading costs.

  - The complexity of a network must not be excessive. Simplifying processes can mean limiting interfaces to what is strictly necessary (this, too, generates reductions in the workforce). The main organisational impact of CFL rail freight’s merger with Arcelor’s transport businesses was to eliminate interfaces.

- More service

  - The service on offer presupposes a guarantee of the service sold under the conditions planned. Service reliability (arrival on schedule) is one of the fundamentals of the service.
Improving the service on offer can for example consist of information sent to customers in real time, enabling them to be reassured that their goods are being tracked and, in the event of an unforeseen delay, to adapt rapidly. It should be pointed out that at the visit to the port of Le Havre, we were told that the reliability of information was seen as the main weakness of a port terminal today, which shows the point to which the subject of information has become a strategic issue in the world of transport today.

Customised service offers to customers which can include associated services invoiced to customers, for example storage (generating jobs), broaden the scope of the transport organiser’s service offer. Railion’s management emphasised the importance of this type of global solution, in particular in sectors such as the steel or paper manufacturing industries. These associated services are invoiced and can be sub-contracted if demand is intermittent or provided in-house if the demand is durable. Offering these services expands rail freight’s commercial positioning and can contribute to a better overall economic equilibrium.

Similarly to combined transport, rail freight operators are faced with a challenge to improve performance. Meeting this challenge calls also for an effort to bundle traffic similarly to what has been done in maritime transport. However, by contrast with combined transport, it also requires reinforcing the professional skills of a transport organiser and placing emphasis on the service dimension of rail freight.
It should be borne in mind furthermore that work on rail freight’s territorial organisation based on the North American short lines model or another organisational model, implies good quality “local” railway infrastructure (tracks and private sidings connected to the rail network). The concerns voiced on the subject recently in Germany and in France in particular augur ill for this type of feeder for rail flows.

5.2.3. Rail freight’s safety and environmental assets can become decisive strategic variables in the coming period

Rail transport can be a link in a predominately maritime chain. It can also be the primary link, or even the sole link in domestic, European or even intercontinental services (Asia/Europe). In this case, it can be an alternative to road and maritime transport. Beyond the traditional criteria involved in the choice of a transport mode (price, reliability), the environmental arguments may acquire growing importance in the coming period.

Because of the rise in the cost of transport or for lack of satisfactory respect for the conditions of sustainable development, moves to relocate certain productions and certain types of trade might occur on a more or less large scale in the wake of the current crisis.

European rail freight can be the transport mode adapted to this new context, either through a more active contribution to intercontinental trade or through a stronger presence in European trade flows, which are unlikely to diminish, or by identifying its relevance more clearly in regional or interregional trade flows which remain very dense.

In Switzerland, the law now requires a regular assessment of the external costs of road and rail traffic, for freight and passenger traffic alike. The study on the year 2005, which has just been published, shows that the external costs generated by road transport are seven times higher per tonne-kilometre than for the rail mode.

As a member of our group pointed out at an internal meeting, this difference, however imposing it may be, can not be considered sufficient proof once and for all of rail freight’s environmental advantages. By way of example, the presence in Turin/Orbassano of diesel locomotives 40 years old on average illustrates the fact that rail freight’s environmental advantages are not always self-evident.

In this respect, it should be noted that the chairmen of European railways undertook a commitment on 7 May 2008 to reduce CO2 emissions from trains by 30% between now and 2020. The announcement made recently by the Swedish rail freight operator, Green Cargo, to use “green” electricity for its trains operated on electrified lines, to equip its diesel locomotives with cleaner and more energy-efficient engines and to provide “Eco Driving Rail” training for its locomotive drivers in 2008 is in keeping with this line of action.

For the argument to be conveyed effectively, the environmental advantages of a rail-based solution have to be demonstrated case by case in a detailed comparison between modes enabling their respective relevancies to be appreciated.
European rail freight’s social assets can be associated with safety or with security. Members of our group emphasised this dimension several times. A comparison with maritime transport illustrates its importance.

» **Rail transport safety** can be highlighted in particular in the face of relatively frequent acts of piracy at sea, in particular along the coasts of Indonesia, Somalia and Nigeria. It should be borne in mind that the value of a laden ship can be as much as a billion US dollars.

» **The integrity of the goods carried can also be an asset for rail transport.** The growing size of container ships, incorrect positioning of containers and overloading in some instances have led to more frequent losses of containers during navigation. These losses which sources estimate at 5 000 to 15 000 per year, generate direct costs, but also environmental threats (goods intrinsically or potentially dangerous) and safety risks (temporary flotsam).

» **Rail freight’s ability to position itself on dangerous goods can also be an argument in respect of other modes.** Following the measures taken after 11 September 2001 (container traceability, surveillance and security guards in particular), which our group saw in the ports of Le Havre and Hamburg, some companies refuse certain types de traffic in some cases (pollutants or dangerous substances). Above all, questions are coming to the fore about the limits of gigantism.
AVENUES FOR GROWTH AND MAJOR CHALLENGES FOR THE WORKFORCE

THE QUESTION OF MARITIME SAFETY

At the beginning of our report, based on our group’s visits to Le Havre and Hamburg, we emphasised the impressive increases in maritime transport performance. This development is neither without adverse consequences nor without limits. In particular, the trend towards gigantism poses environmental and safety problems.

“The accident sustained by the MSC Napoli (in January 2007) is said to have revealed the numerous maritime safety problems connected with containerisation. Under pressure from the United States, the maritime industry has focused much attention on security. This requirement is hindered by the practical reality of inspecting millions of containers. Today the question of maritime safety of container carrying ships and their boxes is emerging. Here too, the giant size of these is raising question marks. Have the giant ships built today reached limits in terms of the guarantee of maritime safety?”


Similarly to the environmental dimension, the arguments in favour of rail-bound solutions in terms of security and safety can not be used once and for all. These assets must be monitored and maintained to become commercial arguments. Safety in particular is linked with values anchored in the railway profession which should be passed on to others.

The dual process of containerisation of goods carried over long distances and of internationalisation of trade seems to be sufficiently solid to extrapolate prospects for growth in maritime transport. However, unexpected developments may affect this forecast. Apart from the environmental argument just mentioned, transit time should be mentioned also. The rise in the price of oil up to the end of summer 2008 led certain ship owners to limit the speed of their vessels. As a result, by lowering the speed from 25 to 19 knots, per-kilometre consumption is cut by half.
Hence, rail freight’s relative positioning could be reinforced by comparison with maritime transport on the European scale or on the Asia/Europe route for shipments where transit time is decisive. The container train that Railion tested in January 2008 for the route from Peking to Hamburg could be a precursory sign of a possible development of rail freight over very long distances on condition of capitalising on a significantly lower transit time (fifteen days instead of thirty), or of reducing the cost differential which is still large. Between the test, the credible experiment and the point where it is relevant, the stages along the way must not be underestimated. Nonetheless, rail freight’s potential assets can be seen more clearly on this type of flow.

To consider the business of a generalist rail freight operator as being that of a railway logistics operator which can position its business on a large variety of flows gives strategic value to detailing its arguments (in the sense of identifying its precise scope and striving to extend them to an operational context).

5.3. Germany: the only country among the six visited to have recorded a recovery of its modal share in the last period

5.3.1. A combination of an objectively favourable situation and of strategic choices

The place occupied by transport varies from one country to another. The new member countries benefit from the impact of enlargement as seen especially vigorously in Poland. There are no such similarities in the 15-Member EU which saw freight transport increase on average at the same pace as economic growth. The situation is atypical in Germany from this standpoint and can be characterised by _specialisation in transport and logistics._

**Volume of freight transport (in tkm) in relation to the GDP (in constant euros) in 2007 on the basis of an index of 100 in 2000**

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It should be pointed out that Poland and Germany’s transport specialisation are not of the same nature. In road freight transport alone, only 1% of Polish firms own more than 10 vehicles whereas the proportion is 14% in Germany (Sources: “Le TRM en Allemagne” [Road freight transport in Germany], Laurent Guiléry. Comité National Routier. May 2007. “La question clef de l’emploi” [The key question of employment]. Michel Savy. Bulletin de l’Observatoire des politiques et des stratégies de transport en Europe. Conseil National des transports. France. September 2008). This fragmentation in the sector is accompanied by a far lower price positioning which deteriorates rail freight’s position in Poland and tends to bring down the price of international road transport.

The rail freight situation in Germany can not be reproduced elsewhere. As a union member of our group pointed out, the specific features of Germany are favourable to freight transport in general and to rail freight in particular:
By contrast with other European countries, Germany has a dense industrial tissue and a very strong export capability, in particular for capital goods.

Hamburg is one of the largest European ports. The port managers we met during our visit told us that between 12 and 15% of freight flows in Germany are to or from the port of Hamburg. There is no such equivalent in the other countries in our study. Furthermore, Hamburg and also Bremen are important railway ports. Hamburg on its own captures roughly 10% of Railion traffic.

Germany occupies a central geopolitical position in Europe, which has been further reinforced since reunification and European Union enlargement. We can gain an idea of this situation when we see, as our group noted during the visit to Hamburg, that 60% of Railion trains are cross-border trains. In 2003, the most recent year for which we have this information, Germany was the railway territory which had the most exports (mainly to Italy, Austria and France), the most imports (primarily from The Netherlands, Poland and Austria) and was the country most used in transit (transit railway traffic for freight crossing the national territory without being loaded, unloaded or transhipped). (“Rail freight transport trends. 1990-2003”, Statistics in Focus, Eurostat, January 2005).

A proactive transport policy has been developed based on these assets.

We have already noted this point with regard to the port of Hamburg, but it is true also at federal State level. A strategic synthesis published by the Ministry of Transport entitled “Integrated transport policy: our view for a mobile future” chose a middle path in 2000 (growth in the modal share to reach 24% in 2015) between a “laisser-faire” scenario leading to a further drop in rail freight (a modal share of 16% in 2015) and a high scenario implying proactive choices, notably with regard to road infrastructure charging (a modal share of 28% in 2015).

Road pricing, which came into force on 1 January 2005, follows on from these policy guidelines to a certain extent. It has also been seen that the fiscal burden borne by a 40-tonne HGV is 25% higher than in France and 51% higher than in Poland.

5.3.2. The price of transport: a parameter influencing strategic decisions where public authorities can play a role.

A report entitled “From lorries to trains. 12 examples of successful conversions in freight transport modes” (Alliance for the rail mode.

Preface by the Minister of Transports, Housing and the City. 2007) produced at the request of the German government in 2007 gives concrete cases showing the reasons why the rail share in freight transport has grown in recent years.

The logistics managers of the twelve companies questioned give a variety of singular reasons, which we shall address later in this report, but all agree on one point, namely what triggered their thinking about switching from road to rail is the signal conveyed by the price of road transport. All mention the upward trend in the price of road transport, notably due to the increase in the price of petrol. However, all also underscore the impact of the government decision to introduce a toll for HGVs. The toll was confined originally to HGVs over 12 tonnes on motorways, but doubtless it contributed to increasing the price of transport and to sending an additional economic signal and as a result, triggered the start of a process which then required a convincing service offer and in turn led to the choice of a rail-borne solution.

It should be pointed out that the German State contributed to the choice of the rail solution in certain cases by partially subsidising the creation or modernisation of private sidings.

The Eurovignette III directive may give further impetus to the thinking in the previous directive by launching the European Union on the path to internalisation of external costs. In the case of Germany, we can see that the measures, which were finally relatively modest, taken in the framework of the
Eurovignette II directive, have nonetheless contributed to reversing the trend towards the decline of rail freight.

5.3.3. Rail freight’s relevance: a multi-faceted concept

The study of the conditions contributing in twelve concrete cases to the shift from road to rail identifies rail freight’s area of relevance beyond the environmental arguments mentioned systematically, but more or less intensively.

» An effort to combine flows enlarges rail freight’s area of relevance. The chemicals group, BASF, shifted its flows (1 million tonnes per year) originating in Ludwigshafen from road to combined transport in two phases, the first in 2000 and the second in 2004. What are the conditions?

- creation of an intermodal terminal, for the subsidised part;
- setting up of a terminal operating company involving other players specialised in combined transport (Bertschi, Hoyer, Hupac, Kombiverkehr);
- use by other shippers of combined transport trains departing daily to 17 destinations in Europe to the point that in 2006, BASF accounted for only 42 % of the traffic.

» Rail freight’s field of relevance can be improved. In the context of the Mora C plan, Raillian had stopped rail services to Neustadt (Bade-Wurttemberg). A review of the transportable potential of the Félix Schoeller group’s plant led to Raillian’s return at the end of 2004 for carriage of pulp from Vlissingen to The Netherlands (30 000 tonnes per annum) and henceforth for transport of finished products to several intermediate storage points in Europe. What are the conditions?

- creation of a new private siding funded by the Region, the pulp and paper company and Raillian;
- local storage, allowing for rapid delivery to end customers.

These concrete cases illustrate the importance for rail freight operators of certain highly qualified jobs consisting of identifying a customer's logistics parameters, highlighting the advantages of a rail-based solution in one situation or another, putting the discussion on the price of carriage into perspective by integrating the other dimensions of the logistics cost, and negotiating.

The study mentioned also highlights this possible enlargement of the scope of rail freight’s relevance in the following two examples.

» Short distance traffic can be integrated in some cases in rail freight’s field of relevance. The Berenzen group (alcoholic beverages) switched a 41 km flow of 115 000 tonnes per annum from road to rail at the end of 2006 (the firm MKB). A rail shuttle serves the Stadthagen warehouse once every night with a return empty early the following morning. The delivery by rail of products imported from Spain and Norway as well as an organisation to avoid empty runs is under study. What are the conditions surrounding this service?
AVENUES FOR GROWTH AND MAJOR CHALLENGES FOR THE WORKFORCE

- creation of a new private siding for the subsidised part;
- a simplified logistics organisation (the impact of incoming and outgoing lorry movements on production is eliminated) and which is more reliable (reduction in the number of damaged pallets);
- a lower rail freight price.

Rail freight's relevance can be compatible with a higher price in some cases. One of the leading foundries in Europe, located at Stadtallendorf (Hesse), shifted a flow of 200,000 tonnes per annum from road to rail (Railion). The trains of raw materials arriving from Duisburg and Sythen are regrouped at Wanne-Eickel (North Westphalia) to form a daily trainload to the foundry. What are the conditions?

- an investment in the containers and bimodal skips for use on a train as well as on an HGV;
- more efficient logistics (shorter transit time and without any slack time; more reliable deliveries irrespective of weather conditions; lower storage costs; improvement in the coke quality as a result of eliminating one stage in the transport chain).

We shall not draw hasty conclusions here from these examples, but illustrate that on two of the most sensitive points, distance and price, the analysis of rail freight's relevance does not necessarily meet the usual criteria and above all, it requires a close, multidimensional examination.

It should be stressed in particular that the price of transport is not equal to the logistics cost borne ultimately by the shipper.

European rail freight’s future calls for a significant improvement in performance, as we found during our visits. Public policy lines must accompany this process so that rail’s modal share in freight transport increases.
WHAT MODEL FOR WORK AND EMPLOYMENT IN EUROPEAN RAIL FREIGHT?
A projection of European rail freight in the future raises questions about its positioning on a market and operators’ production organisation as well as transport policy and funding of infrastructure. However it also raises issues about the forms of productive compromise and the ways of linking the economic and social dimensions.

The parts of the report focusing on the possible impact of the European rail freight situation on employment have shown the extent of the uncertainties and risks prevailing in the current period. These uncertainties and risks may be amplified by human resource decisions taken or not taken at the appropriate time or not. To deal with this type of situation, there is a clear need to foresee developments.

6.1. Forward-looking management of employment and of competencies would enable change to be foreseen and prepared

6.1.1. First stage of forward-looking management of employment and competencies: the analysis of changing trends in employment and in job skills

Population variables are a powerful tool for identifying and foreseeing developments, a solid basis for reflection.

In reply to questions put by members of our group, several operators visited (in particular PKP Cargo and Railion) spoke about population imbalances causing concern. This situation shows the value of not only analysing population variables retrospectively, but also with an eye to the future. Following closely the age of the
AVENUES FOR GROWTH AND MAJOR CHALLENGES FOR THE WORKFORCE

relevant staff in the main families of job skills enables managers to anticipate the risks of gaps (massive departures for retirement of the staff of a given family of skills at a given time horizon, causing a risk of loss of know-how and/or a need for renewal in a short period). Note that these risks of gaps must be considered all the more attentively in the railway field since certain skills require a long period of apprenticeship and include a large amount of experience. This is what one of the members of our group emphasised when he proposed that we make a projection to 2020 to examine what would be left of the staff currently working in Railion Deutschland at that time horizon. The SNCF undertook work along these lines a few years ago and found that 70% of the staff present in 1997 would have left the company in 2012, which provided a yardstick to measure the population impact to be negotiated.

Retirement issues play an important role from this standpoint.

Firstly, the retirement age can become uncertain as a result of the impact of retirement age law reforms, but also for the adjustment possibilities that can be left to the persons most concerned as well as for any attractive mechanisms for early retirement in restructuring situations. This uncertainty can complicate efforts to make population projections.

Secondly, the trend to a later actual retirement age poses new terms for end-of-career management. In the internal discussions in our group, the question of the age limit for driving trains was raised at times.

As we have already stressed, rail freight operators are now organised differently. They do not all call for the same types of job skills. In restructuring, staff cutbacks have not affected the different rail freight skills in the same manner. Until now, the productivity gains anticipated have pertained proportionately more to staff working in marshalling yards and intermodal terminals than train drivers and staff working on the organisation of transport. In some instances (at EWS for example), management staff has been contracted within a context aimed at shortening the line of command. Prospective thinking implies addressing the question not of the ideal structure in terms of qualification, job skills, or even position in the hierarchy, but in terms of possible trends for change.

In a period of uncertainty, the need to project into the future is paradoxically more complex to formalise, but more necessary to implement. This is true in particular in the field of human resource management. The tools available for forward-looking management of jobs and competencies can be used for this purpose.
6.1.2. Transmission of experience at the heart of the future of European rail freight

Depending on the job skills performed, on-the-job experience does not have the same degree of importance. Railway skills are part of these job skills for which a high proportion of experience is linked with specific aspects in the fields of technology, regulations and safety. The key reference to safety in particular was mentioned many times by staff representatives during our group’s meetings.

We have mentioned the cohesion in the positioning of the major German road transport companies through the combination of the control exercised over job skills by drivers and organisers on the one hand and quality of service on the other.

Similarly, control over railway processes, service reliability and the guarantee of safety are among the possible criteria for promoting rail freight and the choice of one operator or another.

These criteria can be associated with railway job skills. There are three points to be made in this respect:

- To perform these jobs, prior physical and psychic conditions must be met. This creates a high degree of selectivity at the recruitment stage.
- The need to identify sensitive job skills in order to exercise control over processes, ensure reliable services and guarantee safety. The importance the managers of the port of Le Havre attach to the job skills of train formation staff, for example, should be borne in mind.

» The need to confirm the mechanisms in force to ensure good quality transmission of experience and know-how.

The important dimension of experience has been mentioned in different forms during our visits. EWS management emphasised that a large part of headquarters staff had come from the operations sector after a “demanding and very competitive” process focused on recognition of “competencies in the field”. Fret SNCF headquarters emphasised along the same lines that roughly 60% of SNCF managerial staff came from internal promotion. The culture of internal promotion is just as particularly vigorous in DB.

This issue has been underscored by the union organisations through apprenticeships. EWS and CFL Cargo union representatives in particular stated that they had defended training schools threatened with closure.

Because of the complexity of rail freight, a precise knowledge of railway production, acquired to a large extent through experience, is a fundamental parameter. This parameter is all the more important to underscore in a period of upheavals which can lead to large flows of departures from a rail freight operator over a short period and which can upset the fragile balance of expertise in certain specific types of job skills.
6.1.3. Discussions and consultation: an indispensable aid for the anticipation effort

Forward-looking management of employment and competencies which is adapted equally well to a growth path and to a crisis scenario, generally implies that tools be developed and analyses carried out as well as, in the case at hand of European rail freight, special attention to expertise and to transmission of experience. There is a dimension lacking for the purpose of anticipating in forward-looking management, namely that relating to the restructuring process itself.

When projecting into the relatively near future, five years ahead, restructuring may be interpreted as a risk, an avoidable risk for Railion Deutschland in the light of its current situation, a probable risk for other operators, a sure risk for operators with a serious deficit, a non-stabilised organisational situation and the constraint of having to face a deteriorated economic situation under these conditions.

The Question of Anticipating Restructuring as seen by the European Commission

The anticipation effort mentioned in this chapter is a requirement of our times as can be seen from the European Commission’s position expressed in the following excerpt.

“The end purpose of the Commission with regard to restructuring is to contribute to strengthening and spreading a practical culture of anticipation and innovation in carrying out restructuring: it is a matter of passing from a purely curative management and at best passive anticipation to preventive action which avoids conflict or crisis through an early and negotiated process of restructuring. This process of change assumes the risk taking involved in restructuring so that its result will be a competitive change in activities and positive job mobility for the employees concerned; this is the dual criterion for successful restructuring …

The challenge is to mobilise the resources needed for the two key beneficiaries suffering the brunt of the impact of restructuring:

» The individual with a view to developing his ability to adapt and to safeguarding his career;

» The labour market with a view to safeguarding the economic tissue and the employment area”.

Source: “Participation of civil society and social partners: anticipate change and coordinate the Union’s policies”. Fernando Vasquez (Deputy Head of Unit at the European Commission. In search of the common interest. Directed by Philippe Herzog. Confrontations Europe. 2008. p 130.
When there is a risk, even minimal, an attitude of prevention should prompt preparation of a diagnosis shared between employers and staff representatives. In our group’s internal discussions, this concern for preparing a shared diagnosis was mentioned several times. The notion of sharing the diagnosis does not necessarily mean that a consensus has been reached. It has more to do with the need for setting up the conditions needed for discussions:

» Exchange of information on possible tendencies for change.

» Preparation of scenarios of possible responses to address the difficulties arising from these tendencies.

» Post-analysis of subjects not to be addressed under the pressure of urgency.

This stage can lead to a phase of negotiations on subjects which can be treated upstream.

If restructuring is launched, a process of consultation can be started under better conditions because of this preparatory phase. Questions raised during our group’s internal discussions such as: “What is the reason for this restructuring?” or “What is the purpose of this restructuring?” can be addressed more easily when staff representatives are not discovering a situation or that a risk considered earlier is materialising.

In fact, when restructuring occurs, if a prior phase of discussion of the diagnosis of the situation, consultation on possible outcomes, shifts in the options adopted and negotiation of their consequences for staff has not taken place, the margins of manoeuvre are far smaller, discussions between social partners are more limited and hence more unilateral. Consequently, the chances of success for the reorganisation are considerably smaller.

6.2. The notion of employability is becoming a key reference

6.2.1. The reference to employability considered necessary by the group

A British union representative and EWS employee stressed that the past restructuring had not been too painful because of the large proportion of early retirements and voluntary departures to other operators. However, he added that if a new phase of restructuring occurred, the situation would be different, “few people are prepared to leave now”.

The situation is different for the other rail freight operators in our sample since in-house redeployment procedures can still be activated. Nonetheless, these procedures have their limits like those mentioned at Le Havre regarding the difficulty of redeploying a fifty year old shunter. Moreover, to apply them in practice, it is assumed that the other business sectors have
a corresponding employment need and that the volume of jobs to be absorbed is compatible with the possibilities of these other activities. The combination of these difficulties and more strict conditions for early departure into retirement could in future exhaust the possibilities for accompanying the staff downsizing which have prevailed until now.

This results in an essential need to project into the future, either by creating the conditions for the dynamics of sustainable development of European rail freight, or by anticipating the risks of further redundancies. In both cases, the notion of employability can be a useful reference. This concept has been used several times in internal group discussions or by our interlocutors during our visits mainly at Le Havre and Hamburg.

The value of a reference to this concept is reinforced by the existence of joint recommendations on its use in the rail sector which were adopted on 7 October 2007 by the CER, ETF and EIM.
The five joint recommendations

1. “The railway companies in Europe should use the strategy of employability as developed in this memorandum as a central theme for human resources policy and thereby package the various instruments for personnel and organisation development into an integrated approach.

2. Employability as a strategic concept is based on prevention and aims to create a working environment which maintains and improves the capacity of the workers in respect of qualifications and competencies as well as health and fitness in order to be ‘employable’ in general terms. The responsibility is a shared responsibility of the company, the employees, works councils and trade unions.

3. Aims, principles and framework conditions for the implementation of the strategy into operational practice should be agreed on the basis of social dialogue between the social partners in order to allow the benefit of the approach to be effective for both parties, i.e. the company and the workers.

4. The European social dialogue on railways will promote and accompany the process of extending and implementing employability as a central theme of modern HR policy and carry out interim assessments from time to time. This can occur through various instruments: policy conferences, conferences for exchanging work and experiences, monitoring and via the making available of instructive materials (case studies for good practice, basic guidelines, specimen agreements, ...).

5. A conference bringing together representatives of trade unions / work councils and management experienced in the issue of employability in practical terms on company level might be organised next year. This would allow exchanges of experiences, benchmark of good practices and direct discussion between European and company based social dialogue on employability aspects.”
6.2.2. Training: a privileged instrument for reinforcing the employability of personnel

Staff training can be considered as one of the means for maintaining and capitalising on the abilities of workers. In railway companies, training has historically played a decisive role given the importance of specific experience of railway skills, and because of the importance of internal promotion. As emphasised by a union member in our group, in-house training in these companies was consequently a social issue because it enabled young people with little initial training to acquire a skill and to begin a professional career. The changes under way in the rail transport world tend both to raise the structure of qualifications (restructuring often affects firstly the least qualified jobs) and to greater selectivity for in-house training. The length of driver training has been given special attention in our group’s work. A member of our group referred to a recent study on the subject and emphasised the very large disparity in situations from this standpoint within the European Union, mentioning differences of from three months to three years. These differences reflect the diverse positioning of Railway Undertakings from the local operator to the generalist operator, present on the entire national territory and involved in international services. It may also reflect a different level of initial training. The normative length of training does not take account of individual differences in apprenticeship abilities.

A general trend to shorter training is generated by the separation between the passenger business and the freight transport business. Consequently training evolves towards “what operators need where they need it”.

This is in fact what was observed during our visits. The disparity is very large between the maximum observed at PKP Cargo, where training is the same for all categories of drivers and can take up to 27 months (including a trainee period as assistant driver) and the minimum announced among our interlocutors at ECR France of 9 months (including 25 days of accompanied driving).

The trend towards shorter training has been mentioned several times. At CFL, training used to take 27 months since all drivers crossed at least one border on duty and had to learn the Luxembourg, Belgian, German and French regulations and be familiar with up to eight different types of locomotives. Today CFL Cargo drivers are trained in 20 months for the Luxembourg regulations and for those of one other country because a driver will drive on one line only. Training periods of 8 to 9 months are envisaged. Management at PKP Cargo would like to eliminate the trainee phase to confine the length of the training period to 18 months.

This trend does not pertain solely to drivers. At Fret SNCF, several training channels are proposed for ground staff:

- For shunting, the expression of needs is made for each site according to a required level. Basic training takes 15 days plus specific training relating to the job at a given site. Altogether training for a shunter takes 3 calendar months, with the course alternating between theory and practice.

- In the “operations” sector, basic training is the same for freight and for signal boxes. Management considers that this shared course is not worthwhile because some of the competencies will never be used on...
the job. The person will have to undergo training again when he switches from freight to signal boxes.

The Fret SNCF regional headquarters representative emphasised that training had a cost and therefore it had to be effective, striking a good balance between immediate employability and the possible career development of staff. However, he considered that each type of training was the fruit of years of history and stratification; it has been established through successive layers of norms and constraints which were warranted for safety reasons among others, some of which were still needed and others not. For example, out of the three months required to train a freight train shunter, many of the modules were no longer needed. Roughly 15% of the competencies acquired were used in reality and the competencies that were really needed were not systematically acquired.

This critical view of the training traditionally dispensed by Railway Undertakings was challenged by union members in our group with the following arguments: training that is too specialised does not enable staff to understand the interdependencies that are fundamental to operation in a network environment; it is a narrow view of employability, the expression of the weakening of the social responsibility of Undertakings in a field that is fundamental for the functioning of society.

The question of training is a sensitive issue. Striking a balance between the cost / investment ratio from the undertaking’s standpoint and the personal effort / long-lasting value ratio from the employee’s standpoint is not easy. Under the pressure of competition, it may be tempting to reduce training expenditure. The gain over the short term may however become a cost more difficult to assume over the medium term if the operator has to redeploy that staff in the context of restructuring. It may be wiser to optimise training expenditure in order to find a satisfactory compromise for the Undertaking and for employees between the short and the medium term.
6.2.3. Another criterion for staff employability: Job attractiveness

In periods of shortage of certain job skills (recruitment difficulties) and/or of a risk of departure of one competency or another to competitor operators, the question of job attractiveness is a priority subject. The concept of attractiveness may however not pertain solely to these economic situations and may become a more permanent reference in the framework of dynamics to ensure employability of staff.

**AN EXAMPLE OF COHESION IN THE ROAD TRANSPORT SECTOR**

At one of our group’s meetings, the example of road transport in The Netherlands was mentioned. The following excerpt describes the example of a cohesive social model. The concept of cohesion does not imply any value judgement about the quality of the model from the standpoint of the persons concerned, but it aims to highlight a certain effectiveness of the model in relation to history and the characteristics of the job.

“As in Germany, Dutch carriers are specialised on niche markets where price does not play an important role. Dutch drivers are hyper-productive ... According to many persons, drivers work far more intensively than in France: 12 paid hours per day is not unusual in Dutch transport companies.

Some companies work to full capacity: a full work week of over 60 hours per week and one week’s rest with another driver taking over.

This hyper-productivity is also due to the difficulty of recruiting new drivers ... the key question for company managers is not to find new markets but rather to find drivers to handle the flood of orders all over Europe”. “To retain the best drivers, the companies keep raising the salary stakes. At the same time, they recruit in other countries”.

A cohesive social organisation model needs to be found for this. The model must take account of the following:

- the inherent job constraints. At Le Havre, Fret SNCF regional management underscored the difficulty of freight jobs on the ground: work outdoors, work requiring customer relations, technical duties, data input into information systems, knowledge of contracts of carriage, safety standards, etc. The difficulty of freight train drivers’ jobs was also mentioned several times in connection with the service continuity, mobility and night work constraints;

- the characteristics linked with the performance expected;

- the parameters which can make a job attractive, for example, the value of the work, consideration and recognition by peers and by management, remuneration and career development possibilities, etc.

6.3. The concept of multi-tasking synthesises, sometimes confusedly, the changes anticipated

6.3.1. The field of multi-tasking must be defined precisely and accompanied

Let us consider multi-tasking as the fact of performing several tasks on the basis of work designed as if these tasks were equivalent and could be performed by one person or another irrespectively.

There is one example of multi-tasking at CFL Cargo with the job of shunting locomotive driver. Today this person drives rains, couples and uncouples wagons while at the same time guaranteeing safety for shunting movements. He combines three previous duties, that of the shunter, the coupler and the driver. In terms of cost, the advantage is self-evident. At CFL Cargo this change has led to a reduction in staff.

According to a port authority representative at Le Havre, there is a clear need for multi-tasking, but it varies depending on the situations at hand. He recommended to our group during our visit to make a distinction between the work of a line driver whose job is to run the train safety for “six or seven hours” from that of a driver working a terminal haul. The question of multi-tasking is not relevant for the former. However it may be of interest for the latter similarly to what was done at CFL Cargo.

The same type of distinction must be made for ground staff. According to Fret SNCF regional management, in the specific case of the railway activity at the port of Le Havre, productivity gains and quality improvements could be made by combining current job skills more closely, notably:

- Between maintenance skills and operations skills (recognition of fitness for carriage, train formation, shunting) to improve entry and exit of containers;
Between operations skills and handling skills.

Nonetheless, multi-tasking is not the only solution in the work organisation. At some yards, Taylorisation of tasks is more productive than multi-tasking because there is enough work for this to be done. In this case, multi-tasking is not a lever for improving performance.

As a general rule, in multi-tasking there is a risk of underestimating the implicit and non-formalised competencies required to handle an unforeseen or exceptional situation or a relatively rare event. In the case of the railway skills considered here, the main question therefore is safety and how to control this risk. It is moreover in the area of safety that union organisations present at Le Havre expressed reservations. A union member emphasised in fact that to couple a train, “today the driver is the back-up; he checks that the operation has been done properly; he must not do the job himself”.

In Hamburg, Railion management underscored both the important role of multi-tasking, but also recalled its limitations, stating that it was not possible to be completely flexible. According to a union member in our group, the increase in multi-tasking was a key element for the survival of single wagonloads. Drivers perform marshalling operations, drive trains up to the customer’s private siding, do the loading and unloading, etc. They are totally integrated in the added value chain. However this multi-tasking was negotiated. It was not introduced at a discount, but at a high level with training described as “multi-functional”.

6.3.2. Multi-servicing and multi-skilling are concepts closely tied to the concept of multi-tasking

Multi-tasking does not encompass all of the evolutions possible. Let us consider multi-servicing as the fact of performing tasks which are in principle performed using other job skills, but which are an integral part of certain continuity in a service. A job skill is performed to the full, but there is a different sequence at the appropriate time in order to benefit the service relationship.

For example, multi-servicing may take the form of a train driver working on a terminal haul making a telephone call to a customer as a delivery man may do in road parcels services. From the standpoint of the job, the change is on the fringe and presumably poses few conceptual problems (which is not to say that it will be accepted easily). It introduces a tangible perception for the driver of the end purpose of his work and brings appreciable added value to the customer. In terms of cost, this evolution has no impact.

Multi-servicing can also be viewed more broadly. At the our group’s meeting with the director of ECR France, the latter strongly emphasised the need for greater acceptance of responsibility on the part of staff to deal with a business that fluctuates and therefore with a subsequent dimension of unforeseen and random events to manage. By comparison with Tayloristic type organisations, this appeal for initiatives in the field, be they individual or collective, can contribute to the efficiency of a service and also to the value of work. It can be seen that this type of practice can not be envisaged in the same manner in a small recently-founded company as in a large incumbent operator.
The lively discussions in our group in the wake of this statement also prompt us to emphasise how important it is that this type of system be accompanied, circumscribed and negotiated to avoid any excess or misuse, be it in the balance between professional life and private life or in respect of railway fundamentals.

Let us consider **multi-skilling** as the fact of developing multiple skills to ensure the service relationship to the best. This is presumably the model with the greatest potential from the business standpoint because it is entirely oriented towards the service relationship. The associated risks are the usual ones, namely the risk of doing too many different things or the risk of having to cope with conflicting priorities, and require the competencies needed to handle these situations (qualifications and therefore training and higher pay) and the costs avoided (juxtaposition of jobs avoided) have to be analysed case by case, but may be conducive to a better quality/cost positioning.

It can be considered that **multilingualism among train drivers** to be able to extend traffic started in Germany onwards to Denmark, France or Poland, which was mentioned by Railion management as being as important an idea as multi-tasking, is an integral part of this idea.

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**THE SUBJECT OF MULTILINGUISTIM IN THE ROAD TRANSPORT FIELD**

The question of multilingualism does not occur in the same terms in road transport. However, it can be said that for road transport, it has become an international dimension of competence.

“**However, low-cost East German employees are rather less well trained than their West-German counterparts, but they have an advantage which emerged in many interviews; they speak Russian, which enables them to be hired in the former Soviet empire. By contrast, many German speakers point to the weakness of French drivers in terms of foreign languages, which is a weak point in international road transport. On the whole, transport and logistics in Germany requires a good level of qualifications today for drivers and for warehouse employees alike. We see here a balance between efficiency/modernity/costs***”

Beyond the differences between the concept of “multi-tasking, multi-servicing and multi-skilling, the evolution towards this type of professional practices calls for several dimensions to be reconciled:

» an economic dimension summed up by optimal use of resources at a given cost at moment m,

» a service dimension consisting in summary of a work content driven by the appropriate response for a customer,

» a social dimension summed up by reconciling professional life and private life,

» a skills dimension summed up not only by knowledge of the fundamental competencies needed to perform the job required, including the ability to be able to deal with unexpected events, but also by the ability to change posts and even companies,

» a dimension about the method of evolution consisting in summary of application of the principles of discussion, consultation and negotiation.

6.3.3. Creation of new job skills or emergence of new professionalities specific to rail freight

The idea whereby rail freight would evolve, creating new job skills is also a subject of confusion. As underscored in our group’s work, the new occupations often mentioned today consist in reality of combining core tasks, for example in operations, the brake tests, coupling or recognition of fitness for carriage.

That being said, the split between the different rail businesses which companies previously ran as an integrated business has led to specifying certain occupations by specialising them for rail freight needs. Fret SNCF gave us an example of this during our visit at Le Havre with the CRML, i.e. drivers whose job consists of driving freight trains on terminal hauls and for short-distance journeys with low-horsepower locomotives. In this case, this new professionality corresponds to forming the initial levels of qualification for existing skills (lower remuneration and shorter training than for line drivers with TB qualification, hence lower cost, possibility of in-house promotion for young early school-leavers) to perform a less complex job.

The principle is the same with the creation of the occupation of checker at CFL Cargo. The occupation of inspector has been split in two: the job of inspector still exists in its full form whereas a job of checker has been created. Beforehand, CFL used inspectors for technical inspection work on passenger and freight rolling stock. The level of training was very high. Now, the checker has become a “light” inspector; he does not have the competencies of a conventional inspector, but can perform his duties as long as goods do not cross the border or do not transit from one Railway Undertaking to another. Checkers are shunting staff who receive additional training to perform this first-level inspection. Creating the occupation of checker has made it possible to cut costs because the checker’s remuneration as well as his training are less than that of an inspector and better use is made of personnel.
The examples mentioned so far are new professionalities rather than new job skills. Moreover, it can be seen that depending on the case, these new professionalities consist of **enlargement of the competencies** required (multi-tasking, multi-servicing, multi-skilling) or conversely **specialisation** (CRML, checker). The question can nonetheless arise of whether to create new occupations or for new competencies to emerge.

Although one incumbent operator’s strategy consists of a positioning as a railway logistics operator as mentioned in a working brief produced by a member of our group, this implies reflections about the occupations corresponding to this broader approach to rail freight.

This positioning was mentioned by several interlocutors, in particular by Railion, as a vector for a positive way out of the difficult single wagonload situation and by PKP Cargo as a project (“to guarantee a global door-to-door service including beyond rail transport a business of running multimodal transport, a transhipment business and a re-packaging business”).

This type of positioning can be conducive to:

- either new occupations or new ways of performing certain jobs, for example to carry out or to organise a storage business;
- or focus on new competencies (for example the ability for rail freight sales staff to identify and highlight logistics advantages).

The activity performed for some time now at Orbassano of consolidating freight originating from a dozen Turin-based industrial sites specialised in automotive equipment (organisation of road transport from the sites to the terminal and then organisation of trains to Valladolid in Spain) has led for example to identifying an occupation consisting of responsibility for the interface between the marshalling yard and the plants.

This type of competencies is composite since it is a combination of general knowledge about freight transport and logistics on the one hand and of specific knowledge about railway production. Here again importance must be attached to experience in the field, to passing it on to others and to recognition of the experience. However, this railway expertise is combined with other commercial, logistics or economic competencies.
It should be said that with regard to these new professionalities, similarly to multi-tasking, multi-servicing or multi-skilling, it is difficult if not impossible, to establish a general rule valid at all times and in all places. It is true, of course, that similarities can be found in the topics addressed among the six operators visited, but a closer analysis points on the contrary to underscoring the differences. The question therefore is to find for a specific situation a solution which strikes a satisfactory and competitive balance between the service on offer, the cost of the service and the employment conditions of the employees concerned.
CONCLUSION

RAIL FREIGHT'S SITUATION IS PARADOXICAL

This is the first time that the social partners on a European scale have addressed the subject of rail freight restructuring and its impact on employment.

Rail freight’s situation is paradoxical; although it holds promise for a good future in the context of sustainable development, it has experienced a downward trend in its market share for several decades.

In particular, it has been unable or has not known how to make the most of globalisation through the boom in maritime traffic nor of the growth in the European internal market. It is true that the situation is different from one country to another. Some companies are facing a critical situation while others have experienced large growth in the wake of radical restructuring. It is also true that the global volume of freight has expanded in recent years, albeit it less than the growth in the total volume of freight transport, whence the continued decline in the global market share.

Given still often insufficient productivity improvements and this decline in the market share, staff numbers have been cut substantially. Railway companies have, with some exceptions, introduced social support measures. Restructuring has taken place, new job configurations have emerged, training has fostered enhanced competencies; outright dismissals have been avoided through redeployment and early retirement. However, in addition to the changes for employees, who have nonetheless nearly all found a solution, ETF has emphasised spread of job insecurity, the increase in geographical mobility and in working time in certain Member States, and the coexistence of different statuses within the same company. Employers place emphasis on the survival of their companies, performance improvements and cost control, and the constraints entailed, notably greater flexibility in order to respond to demand more effectively and withstand the impact of cyclical economic changes, and on efforts to find solutions for employees.

The social partners’ objective is to strike a balance that can be acceptable for both parties, notably between the economic and the social perspectives, occupational and family life, etc., through social dialogue. However, the pressure of lower transport prices on the whole and for rail transport in particular, may contribute to rendering certain developments more difficult. Employment in rail freight can be preserved and even expanded only if all avenues for rail freight growth are explored and developed wherever possible, even if in a first stage, companies build up with resources remaining the same.

VARIED STRATEGIES

Company strategies are varied; some focus on a global multimodal transport product for their customers and on logistics; others are enhancing production and transport planning; several strategies have been identified for the single wagonload sector.
FACTORS TO BE TAKEN INTO ACCOUNT BY COMPANIES

Employment must take account of demographic factors; hence, jobs in the rail freight sector must be sufficiently attractive to ensure recruitment needs ultimately. Transmission of competencies, staff employability, and, more generally, forward planning of employment and competencies taking account of changes in the production and work organisation, new types of jobs and training are already key concepts. The reconfiguration of the European railway landscape and restructuring can not ignore these employment-related aspects.

COMMON RULES

So that competition will not focus primarily on working conditions, minimum European standards, common rules such as those contained in the CER-ETF agreements and since transposed into European Union directives\(^1\), contribute to a smoother flow of cross-border traffic, to preserving and enhancing the standard of safety, to facilitating management of mobile staff in certain circumstances, and to limiting the risks of social dumping.

CRISIS AND RECOVERY PLANS

The current context of the financial, economic and social crisis will doubtlessly bring about changes, but integration of the economic and social dimension remains necessary with a view to sustainable development. However, the decline in European freight traffic, which fell by roughly 35% in January 2009 compared with January 2008, has put some companies in a critical and in some instances disastrous position. European Union transport and social policies may perhaps also have to be modified. In particular Member States’ recovery plans could include larger investments in a more efficient European railway network.

EUROPEAN SOCIAL DIALOGUE

Social dialogue, in particular on a European scale, can contribute to this.

The fundamental objective of this report is to provide input for social dialogue, based on solid facts, whence the method adopted consisting of holding seminars for discussion and the six visits to freight sites in six Member States.

The social partners should continue discussions, circulate the outcome of these exchanges and arrive at joint recommendations wherever possible.

\(^1\) European Union Directive 2005/47 which has incorporated the entire agreement on the working conditions of mobile workers engaged in interoperable cross-border services, Directive 2007/59 on the certification of train drivers, based to a large degree on the CER-ETF agreement on the European train driver’s licence.
The European Social Dialogue Committee of the railways placed the subject of the impact of restructuring of the rail freight business on employment on its 2005/2006 programme of work. Following this work, a joint project including notably an enquiry at six freight sites in volunteer Member States was prepared. It was presented to the European Commission and validated as well as co-funded by the latter and by the Railway Undertakings concerned. CFL Cargo (Luxembourg), EWS (United Kingdom), Fret SNCF (France), PKP Cargo (Poland), Railion (Germany) and Trenitalia Cargo (Italy) were parties to the project. A joint group comprised of representatives from CER and ETF was set up.

The project was formalised in terms of reference on 19 December 2006 in conjunction with an invitation to tender. The terms of reference set out the purpose of the study, namely the impact on staff of freight restructuring in the European Railway Undertakings. Following the invitation to tender, the consultancy firm, Transit, which became Transversales in January 2008, was chosen at the start of 2007 to assist the group in its work. This assistance consisted of preparing a summary report on the European rail freight situation, proposing a methodology for the site visits, contributing to organising these visits and preparing a draft of the final report.

In Brussels, on 21/3/2007, when our group held its first seminar, an initial report and a proposal for a methodology for the visits were presented and discussed. The report contained three parts, a first part on trends in freight transport in Europe since the start of the 1970s, a second on criteria involved in the choice of a transport mode, and a third on the current landscape of European rail freight operators. In the weeks following this seminar, a summary of the initial report was structured around three topics: the rail freight share has fallen by half since the start of the 1970s, European rail freight could win over market shares under certain conditions, the choices made by operators will contribute more or less actively to this development.

Similarly, the discussion held during the seminar about the methodology prompted us to prepare a set of ten site visit sheets (the structure of the site, production at the site, the organisation of production, recent changes in the organisation of production, employment at the site, fluctuations in employment, the consistency of the staff at the site, the working hours of the staff at the site, working conditions of the staff at the site, job skills and competencies).

The sheets were scrupulously used as supporting information for the presentation of the Orbassano site by Trenitalia Cargo management. They were not used during subsequent visits by the members of our group, either because of the way the visits were organised, or because the presentations provided an overview of the rail freight situation and strategy of the operators visited without following the methodology proposed.
Our group’s visits took place over two-days. During these stays, the presentations made by national or local managers of rail freight operators (Trenitalia Cargo in Italy, Fret SNCF at Le Havre, CFL Cargo in Luxembourg, PKP Cargo in Krakow, Railion in Hamburg, EWS in Manchester) alternated with visits, formal and informal discussions, in particular during meals. Staff representatives in the rail freight operators with national or local responsibilities participated in part of these discussions. Their contribution to our group’s work was nonetheless limited by the fact that often they had not been informed sufficiently ahead of time about the purpose of the enquiry.

The visits were made mainly to:

- Turin, on 5 and 6 June 2007, the Orbassano marshalling yard, the Italian terminal installations of the Alpine Rail Motorway, and a locomotive maintenance centre.
- Le Havre, on 3 and 4 July 2007, the port, in particular the Terminal de France, the most modern terminal in France, and the construction site of a new marshalling yard.
- Luxembourg, on 18 and 19 September 2007, a steel manufacturing site (Arcelor Mittal) and its railway siding as well as the terminal installations at Luxembourg for the Bettembourg/Perpignan rail motorway.
- Krakow, on 3 and 4 December 2007, a locomotive maintenance centre, the train driver management centre.
- Hamburg, on 14 and 15 February 2008, the port, in particular the CTA Terminal, doubtless the most highly automated terminal in Europe, and the Maschen marshalling yard, one of the largest in Europe.
- Manchester, on 7 and 8 April 2008, the Trafford Park intermodal terminal (east/west and north/south hub for EWS).

A very detailed summary of the sites visited is appended to this report. In keeping with the terms of reference for the study, shippers’ views were obtained, either directly, from Arcelor, one of the groups using rail freight in Europe the most, or indirectly through the main players present in the ports of Hamburg and Le Havre (port authorities and stevedore groups).

The group’s work continued at internal meetings in Paris on 30 and 31 January 2008, then in Brussels (on 24 June, 18 July, 9 October and 3 December 2008) with a view to preparing the final report. In Paris, the group met with the director of ECR France, to gain an overview of a newcomer’s working methods. On 24 June our group met with B Cargo managers. The supporting documents for their presentation are appended to the report as are the documents presented during the six site visits.
An interim report drawn up on completion of the first four visits was presented and discussed at the Paris seminar on 30 and 31 January 2008. This document was structured around five topics:

1. The visit of the port of Le Havre illustrated the spectacular growth in maritime transport, rail freight’s marginal position and the upheavals needed to increase its modal share.

2. The rail motorways recently commissioned complete the rail freight range in intermodal transport.

3. Single wagonloads: the prime performance challenge for rail freight operators in Europe for which there are different strategies.

4. European rail freight has entered a phase of radical transformations.

5. The performance challenge also pertains to job skills and work practices.

This interim report is also available. The meetings held in Brussels during the summer and autumn of 2008 were used to discuss the drafts of detailed plans for the final report and drafts of some of the chapters.

Lastly, there have been several draft versions of the final report.
# Joint European Group Restructuring of the Freight Business and Its Impact on Staff

(Who occasionally or permanently took part in meetings)

<table>
<thead>
<tr>
<th>Name</th>
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# FREIGHT BUSINESS RESTRUCTURING AND ITS IMPACT ON EMPLOYMENT.

## REPORT

**February 2009**

### JOINT EUROPEAN GROUP

**RESTRUCTURING OF THE FREIGHT BUSINESS AND ITS IMPACT ON STAFF**

### OTHER PARTICIPANTS

We thank all those who welcomed us on the sites and contributed to our work

#### Turin Orbassano seminar

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*Thank you to all those who welcomed us on the sites and contributed to our work.*
## Acknowledgments

**Le Havre seminar**

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**Luxembourg seminar**

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### Paris seminar

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### Hamburg seminar

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### Manchester seminar

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### Cracow seminar

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<td>Trade Unions’ representatives</td>
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### Production of the mock-up and publication

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Production of the mock-up and publication 'Just Say It' Public relations